

## **31. Distribution and Services**

Data in this section relate to continental United States.

For additional or related data on distribution and service trades other than those included in this section, consult the index.

### **CENSUS OF BUSINESS**

The primary source of data on distribution and services is the Census of Business. The first Census of Business covered the calendar year 1929. Although the next was scheduled by law to cover the year 1939, two special censuses covering the years 1933 and 1935 were taken before the regular 1939 census conducted as part of the 16th Census of the United States.

The business establishments covered in the distribution and service fields included in the Census of Business may be generally described as follows:

**Retail trade.**—Places of business primarily engaged in selling merchandise in a retail manner to personal and household consumers;

**Wholesale trade.**—Establishments primarily engaged in selling goods to dealers and distributors for resale or to purchasers who buy for business uses; and,

**Service.**—Establishments engaged primarily in selling services as contrasted with merchandise as in the case of retail and wholesale trade.

In order that the coverage of distribution operations be complete, the censuses taken in 1929, 1935, and 1939 included information on the distribution of manufacturers' sales showing the proportion of manufacturers' output flowing through various distribution channels.

The most important differences in scope among the four Censuses of Business are to be found in the coverage of service enterprises. Service establishments were not included in the 1929 Census of Business at all. In 1933 the Census of Business was expanded to include certain service enterprises. These can be broadly classified into the following five major groups: (1) personal services, such as barber shops, laundries, etc., (2) selected business services, (3) repair services, (4) places of amusement, and (5) hotels. The 1935 Business Census added a number of important businesses among which were banking and finance, motor transportation, real estate agencies, warehousing, insurance, and radio broadcasting. The types of business added in 1935 were dropped in 1939 along with a number of minor types of service business.

In addition to observing the changes in the coverage of establishments from census to census, it is important to take cognizance of the kind of businesses, broadly defined, not included in any Census of Business. Outstanding in this group are the business activities of doctors, lawyers, dentists, and others performing a professional or scientific service, educational institutions, religious or charitable institutions, hospitals and infirmaries, public utilities, and government operated enterprises. In the past, these types of economic activity have been omitted largely because of problems in obtaining information or because reasonably adequate data were already available from other sources.

In many of the following tables data from the various Censuses of Business are compared. Adjustments have been made in the figures to make allowances for the changes in scope among the various years compared.

## CURRENT STATISTICS

**Wholesale trade.**—Monthly statistics on wholesalers' sales and inventories, by kinds of business and by geographic divisions, are compiled and published by the Bureau of the Census. These data are compiled on a sampling basis, covering about 3,000 firms. Using these survey data as a basis, monthly estimates of aggregate sales of wholesalers raised to national totals are prepared by the Bureau of Foreign and Domestic Commerce and published in the Survey of Current Business.

Financial statistics relating to corporations in wholesale trade are available from the annual reports, Statistics of Income, published by the Bureau of Internal Revenue.

Current data on the production, movement, stocks, carry-over, receipts, and disappearances at principal markets, etc., for major agricultural commodities are available from the Production and Marketing Administration, Department of Agriculture.

As part of its investigations, the Federal Trade Commission has collected operating statistics on wholesalers as well as on the wholesale business of chains in various lines. Financial statistics on corporations engaged in wholesale trade whose securities are listed on the national security exchanges are available from the Securities and Exchange Commission.

**Retail trade.**—The Bureau of the Census compiles and publishes monthly statistics on trends in independent retail store sales, by kind of business, for the country as a whole and for selected large cities and other local areas; monthly data for all retail trade combined are also provided for a large number of additional cities and local areas. These data are based on reports from a sample of some 34,000 stores. The Census Bureau also issues jointly with the Office of Business Economics of the Bureau of Foreign and Domestic Commerce monthly statistics on the trends and dollar volume of retail chain store and mail-order house sales nationally by kind of business. Monthly estimates of the dollar volume of retail sales by kind of business groups are prepared by the Office of Business Economics and are published currently in the Survey of Current Business.

Indexes of department store sales and stocks are compiled by the Board of Governors of the Federal Reserve System and by each of the 12 Federal Reserve Banks for its district. These indexes are published monthly in the Federal Reserve Bulletin and also in the Survey of Current Business. Monthly and annual statistics on consumer credit are compiled by the Board of Governors of the Federal Reserve System and published currently in the Federal Reserve Bulletin. Financial data for corporations engaged in retail trade and filing income tax returns are published by the Bureau of Internal Revenue in its annual report, Statistics of Income. Financial statistics on corporations engaged in retail trade whose securities are listed on the national securities exchanges are available from the Securities and Exchange Commission.

**Service trades.**—Typical of the numerous current statistical reports on personal and business services compiled by private agencies are the Horwath Hotel Accountant, Printers Ink, and National Advertising Records. Financial statistics of service businesses derived from corporation income tax returns are compiled and published annually by the Bureau of Internal Revenue in its annual report, Statistics of Income. Current data on service trades are provided by the Bureau of Foreign and Domestic Commerce in its quarterly and annual estimates of consumption expenditures published in the Survey of Current Business.

No. 993.—MANUFACTURERS' SALES—DISTRIBUTION, BY PRIMARY CHANNELS,  
BY INDUSTRY GROUPS: 1929, 1935, AND 1939

[No data are included for following classes of industries: (1) Those in which no sales were made, plants being maintained for purpose of making repairs; (2) those in which plants were engaged primarily in performing labor on materials owned by others so that their sales represented sales of services rather than commodities. This table is limited to industries for which 1929, 1935, and 1939 figures are directly comparable, whereas table 994 covers all industries for which 1939 figures are available. For comparative purposes, data covering direct export are excluded]

INDUSTRY GROUP	TOTAL DISTRIBUTED SALES, 1939		DISTRIBUTED SALES, 1939, COMPARABLE WITH 1929 AND 1935		PERCENT OF DISTRIBUTED SALES MADE TO—		
	Amount (thousands of dollars)	Number of plants	Amount (thousands of dollars)	Number of plants	1929	1935	1939
Total, all groups.....	47,207,641	143,223	33,905,988	104,474	17.5	21.7	23.8
Food and kindred products.....							
Tobacco manufactures.....	11,335,423	50,165	9,586,488	41,900	24.8	21.9	21.8
Textile-mill products and other fiber manufacturers.....	1,320,152	754	1,183,232	624	5.8	30.3	31.0
Apparel and other finished products made from fabrics and similar materials.....	3,408,339	5,003	2,495,524	3,678	12.6	8.2	10.5
Lumber and timber basic products.....	3,020,563	13,900	1,398,400	7,302	4.4	3.6	3.8
Furniture and finished lumber products.....	1,067,686	10,044	1,054,780	10,030	4.0	7.1	8.0
Paper and allied products.....	1,231,981	8,330	975,294	6,152	4.5	5.0	5.5
Chemicals and allied products.....	1,742,369	3,088	1,722,342	3,061	3.8	10.7	14.9
Products of petroleum and coal.....	3,683,992	8,900	1,394,198	4,815	11.1	20.3	23.1
Rubber products.....	2,820,411	981	2,367,873	6,155	60.1	67.7	67.2
Leather and leather products.....	964,295	580	879,964	577	30.5	35.6	20.2
Stone, clay, and glass products <sup>1</sup> .....	1,285,280	3,200	1,273,006	3,209	10.2	17.7	18.2
Iron and steel and their products (except machinery).....	1,434,247	6,890	1,378,473	6,604	6.7	27.2	28.3
Nonferrous metals and their products.....	5,548,316	8,714	4,360,553	4,749	5.9	21.6	25.6
Electrical machinery.....	2,072,606	5,055	1,082,507	2,942	5.9	6.0	25.4
Machinery (except electrical).....	1,629,227	1,958	1,584,810	1,955	20.8	29.7	33.1
Transportation equipment, except automobiles.....	3,102,064	7,897	597,150	1,874	10.0	17.1	20.2
Miscellaneous industries.....	314,082	104	41,473	36	—	—	8
Total, all groups.....	1,106,558	7,432	520,756	4,241	7.1	9.5	14.0

INDUSTRY GROUP	PERCENT OF DISTRIBUTED SALES MADE TO—continued								
	Own retail stores			Wholesalers and jobbers <sup>2</sup>			Retailers for resale		
	1929	1935	1939	1929	1935	1939	1929	1935	1939
Total, all groups.....	2.4	2.3	2.8	32.8	26.2	26.5	18.0	21.1	19.9
Food and kindred products.....	3.2	4.0	5.3	31.6	27.1	26.3	29.1	33.5	34.8
Tobacco manufactures.....	.2	(3)	(3)	89.6	63.9	61.6	4.0	5.2	6.0
Textile-mill products and other fiber manufacturers.....	.2	.1	.2	30.9	30.2	41.2	10.4	12.4	11.7
Apparel and other finished products made from fabrics and similar materials.....	4.5	5.4	7.1	22.2	15.0	16.7	52.2	58.9	50.0
Lumber and timber basic products.....	(3)	1.4	4.0	38.0	36.3	39.6	9.5	14.3	12.4
Furniture and finished lumber products.....	2.5	1.2	2.0	19.6	15.8	17.0	42.4	46.5	43.4
Paper and allied products.....			.4	39.1	30.9	30.5	5.3	6.7	5.7
Chemicals and allied products.....	1.3	.3	.4	39.0	28.9	30.1	14.3	14.3	12.1
Products of petroleum and coal.....	7.6	2.3	1.7	18.6	21.4	25.9	5.2	1.5	1.4
Rubber products.....	1.8	7.6	10.9	15.2	13.3	15.5	14.8	8.1	12.8
Leather and leather products.....	3.3	2.9	2.5	23.0	17.9	19.0	32.0	39.4	38.7
Stone, clay, and glass products <sup>1</sup> .....	.1	.2	.9	48.2	20.8	21.1	4.5	14.5	11.9
Iron and steel and their products (except machinery).....	.3	.3	.3	34.1	13.3	13.2	4.2	5.1	4.8
Nonferrous metals and their products.....	.3	.2	.4	27.6	20.7	21.2	8.2	10.7	7.8
Electrical machinery.....	2.9	1.0	1.2	32.3	34.4	33.5	6.2	7.2	6.7
Machinery (except electrical).....	14.0	9.5	7.4	17.5	17.9	18.1	11.5	9.5	10.1
Transportation equipment, except automobiles.....				37.4	33.4	41.7	48.8	45.3	39.9
Miscellaneous industries.....	2.9	1.4	1.9	35.8	36.8	36.5	27.4	26.0	21.8

For footnotes, see next page.

## MANUFACTURERS' SALES

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No. 993.—MANUFACTURERS' SALES—DISTRIBUTION, BY PRIMARY CHANNELS, BY INDUSTRY GROUPS: 1929, 1935, AND 1939—Continued

INDUSTRY GROUP	PERCENT OF DISTRIBUTED SALES MADE TO— continued						PERCENT OF DIS- TRIBUTED SALES NE- GOVATED THROUGH AGENTS, BROKERS, ETC.		
	Industrial, etc., users			Consumers at retail			1929	1935	1939
	1929	1935	1939	1929	1935	1939			
Total, all groups.....	27.5	26.4	25.2	1.8	2.3	1.8	9.5	12.6	9.0
Food and kindred products.....	6.9	8.6	8.0	4.4	4.9	3.8	10.6	13.6	10.7
Tobacco manufactures.....	.1	.5	.5	.3	.1	(?)	1.7	.5	.5
Textile-mill products and other fiber manufacturers.....	36.6	42.9	36.1	.8	.2	.3	28.7	43.8	25.7
Apparel and other finished products made from fabrics and similar materials.....	11.4	13.6	11.4	5.3	3.5	2.0	4.0	5.2	3.5
Lumber and timber basic products.....	47.6	34.7	29.6	(6)	6.2	5.8	9.9	19.1	19.7
Furniture and finished lumber products.....	28.8	28.8	29.6	2.2	2.7	2.5	13.5	10.4	7.3
Paper and allied products.....	51.8	51.6	48.2	(?)	.1	.3	8.0	5.5	9.8
Chemicals and allied products.....	32.0	33.9	31.5	2.3	2.3	2.8	15.9	14.9	10.5
Products of petroleum and coal.....	8.5	7.0	3.6	(?)	.1	.2	2.4	1.3	3.0
Rubber products.....	28.5	35.3	31.5	.2	.1	.1	2.6	2.2	2.2
Leather and leather products.....	21.5	21.9	21.4	.4	.2	.2	5.5	7.2	7.2
Stone, clay, and glass products <sup>1</sup> .....	38.7	34.1	35.2	1.8	3.2	2.6	7.6	6.6	6.1
Iron and steel and their products (except machinery).....	55.5	59.3	55.9	(?)	.4	.2	6.5	11.9	6.7
Nonferrous metals and their products.....	56.4	60.6	44.2	1.6	.9	1.0	4.4	3.7	4.0
Electrical machinery.....	37.4	27.1	25.1	.4	.6	.4	6.2	6.8	7.1
Machinery (except electrical).....	47.0	45.4	43.4	(?)	.6	.8	4.6	7.8	8.5
Transportation equipment, except automobiles.....	13.8	21.3	17.5	(?)	(?)	.1	8.9	.5	5.0
Miscellaneous industries.....	24.9	22.3	22.5	1.9	4.0	3.3	3.4	4.6	5.6

<sup>1</sup> In 1929, sales to or through wholesale branches and sales to retailers for resale were combined for the most part with sales to wholesalers and jobbers.

<sup>2</sup> Includes sales to export intermediaries.

<sup>3</sup> Less than one-tenth of 1 percent.

<sup>4</sup> Includes 16.5 percent "sales to converters."

<sup>5</sup> Combined with wholesalers and jobbers.

<sup>6</sup> Combined with industrial, etc., users.

Source: Department of Commerce, Bureau of the Census; Census of Business, 1939, Vol. V, Distribution of Manufacturers' Sales.

No. 994.—MANUFACTURERS' SALES—DISTRIBUTION, BY PRIMARY CHANNELS, BY INDUSTRY GROUPS: 1939

[Sales in millions of dollars. See headnote, table 993]

INDUSTRY GROUP	Plants reporting	Total distributed sales and interplant transfers	Inter-plant transfers	DISTRIBUTED SALES MADE TO—		
				Total	Own wholesale branches or offices	Own retail stores
Total, all groups.....	145,544	54,675.6	4,331.7	50,293.9	11,255.0	1,046.8
Food and kindred products.....	50,409	11,739.1	403.7	11,335.4	2,436.6	516.1
Tobacco manufactures.....	750	1,330.9	10.8	1,320.2	396.9	.4
Textile-mill products and other fiber manufacturers.....	5,159	3,678.2	269.9	3,408.3	388.5	6.2
Apparel and other finished products made from fabrics and similar materials.....	14,041	3,052.6	32.0	3,020.6	198.7	112.7
Lumber and timber basic products.....	10,262	1,113.4	45.7	1,067.7	90.7	42.2
Furniture and finished lumber products.....	8,372	1,252.2	20.2	1,232.0	93.9	22.7
Paper and allied products.....	3,254	2,034.9	202.5	1,742.4	257.1	6.0
Chemicals and allied products.....	8,954	3,893.6	209.6	3,684.0	1,192.0	40.1
Products of petroleum and coal.....	989	3,043.2	222.8	2,820.4	1,684.9	40.5
Rubber products.....	595	985.8	21.5	964.3	278.5	95.7
Leather and leather products.....	3,287	1,373.5	88.3	1,285.3	231.8	31.4
Stone, clay, and glass products.....	6,910	1,480.4	46.2	1,434.2	398.6	11.8
Iron and steel and their products (except machinery).....	8,791	6,579.8	1,031.5	5,548.3	1,203.0	12.6
Nonferrous metals and their products.....	5,083	2,401.3	328.6	2,072.7	630.6	6.3
Electrical machinery.....	1,995	1,775.3	146.1	1,629.2	525.1	19.2
Machinery (except electrical).....	7,918	3,244.3	82.2	3,162.1	657.4	49.0
Automobiles and automobile equipment.....	1,109	4,190.4	1,104.2	3,086.2	399.3	11.5
Transportation equipment, except automobiles.....	194	318.9	4.8	314.1	2.4	—
Miscellaneous industries.....	7,463	1,187.6	21.0	1,166.6	189.0	22.3

No. 994.—MANUFACTURERS' SALES—DISTRIBUTION, BY PRIMARY CHANNELS,  
BY INDUSTRY GROUPS: 1939—Continued

INDUSTRY GROUP	DISTRIBUTED SALES MADE TO—continued					
	Wholesalers and jobbers	Export intermediaries	Retailers for resale	Export, direct to buyers in other countries	Industrial, etc., users	Consumers at retail
Total, all groups.....	12,652.4	457.4	9,841.0	1,147.0	13,062.1	832.3
Food and kindred products.....	3,304.4	53.0	3,677.3	98.9	836.4	412.7
Tobacco manufactures.....	818.4	.4	91.5	5.1	6.5	.9
Textile-mill products and other fiber manufacturers.....	1,357.7	12.2	548.7	18.5	1,057.4	19.0
Apparel and other finished products made from fabrics and similar materials.....	421.1	14.1	1,994.4	4.9	223.8	51.0
Lumber and timber basic products.....	398.6	18.8	131.1	12.9	312.2	61.3
Furniture and finished lumber products.....	213.4	5.6	513.4	7.5	344.5	31.0
Paper and allied products.....	519.1	10.0	97.9	16.0	831.5	4.9
Chemicals and allied products.....	731.8	21.9	323.8	62.4	1,211.5	100.4
Products of petroleum and coal.....	598.1	96.4	51.4	139.9	190.6	18.5
Rubber products.....	139.8	6.5	127.8	33.1	281.8	1.0
Leather and leather products.....	239.7	2.3	492.9	12.2	272.1	2.9
Stone, clay, and glass products.....	286.7	6.7	104.3	18.7	511.2	36.3
Iron and steel and their products (except machinery).....	697.8	41.6	249.4	115.5	3,210.1	18.4
Nonferrous metals and their products.....	290.8	11.7	125.9	19.3	909.3	18.8
Electrical machinery.....	519.1	11.9	105.5	44.4	398.4	5.5
Machinery (except electrical).....	636.5	49.0	172.6	267.2	1,309.6	20.7
Automobiles and automobile equipment.....	1,117.7	69.7	753.4	119.4	607.7	7.4
Transportation equipment, except automobiles.....	23.2	18.7	18.6	111.9	138.8	.5
Miscellaneous industries.....	338.5	6.9	201.3	39.1	348.4	21.0

INDUSTRY GROUP	PERCENT DISTRIBUTED SALES MADE TO—								
	Total	Own wholesale branches or offices	Own retail stores	Wholesalers and jobbers	Export intermediaries	Retailers for resale	Export, direct to buyers in other countries	Industrial, etc., users	Consumers at retail
Total, all groups.....	100.0	22.4	2.1	25.1	0.9	19.6	2.3	26.0	1.6
Food and kindred products.....	100.0	21.5	4.6	29.1	.5	32.4	.9	7.4	3.6
Tobacco manufactures.....	100.0	30.1	(2)	62.0	(2)	6.9	.4	.5	.1
Textile-mill products and other fiber manufacturers.....	100.0	11.4	.2	39.8	.4	16.1	.5	31.0	.6
Apparel and other finished products made from fabrics and similar materials.....	100.0	6.6	3.7	13.9	.5	60.0	.2	7.4	1.7
Lumber and timber basic products.....	100.0	8.5	4.0	37.3	1.8	12.3	1.2	20.2	5.7
Furniture and finished lumber products.....	100.0	7.6	1.8	17.3	.5	41.7	.6	28.0	2.5
Paper and allied products.....	100.0	14.8	.3	29.8	.6	5.6	.9	47.7	.3
Chemicals and allied products.....	100.0	32.3	1.1	19.9	.6	8.8	1.7	32.9	2.7
Products of petroleum and coal.....	100.0	59.7	1.4	21.2	8.4	1.8	5.0	6.8	.7
Rubber products.....	100.0	28.9	9.9	14.5	.7	13.3	3.4	20.2	.1
Leather and leather products.....	100.0	18.0	2.4	18.6	.2	38.4	1.0	21.2	.2
Stone, clay, and glass products.....	100.0	27.8	.8	20.0	.5	11.5	1.3	35.6	2.5
Iron and steel and their products (except machinery).....	100.0	21.7	.2	12.6	.7	4.5	2.1	57.9	.3
Nonferrous metals and their products.....	100.0	30.4	.3	14.0	.6	6.1	.9	40.8	.9
Electrical machinery.....	100.0	32.2	1.2	31.9	.7	6.5	2.7	24.5	.3
Machinery (except electrical).....	100.0	20.8	1.6	20.1	1.5	5.5	8.4	41.4	.7
Automobiles and automobile equipment.....	100.0	12.9	.4	36.2	2.3	24.4	3.9	10.7	.2
Transportation equipment, except automobiles.....	100.0	.8	—	7.4	5.0	5.9	35.6	44.2	.2
Miscellaneous industries.....	100.0	16.2	1.9	29.0	.6	17.3	3.3	20.0	1.8

<sup>1</sup> Includes \$412,709,000 (12.1 percent) "Sales to converters."<sup>2</sup> Less than one-tenth of 1 percent.

Source: Department of Commerce, Bureau of the Census; Census of Business, 1939, Vol. V, Distribution of Manufacturers' Sales.

## No. 995.—WHOLESALE TRADE—SALES AND STOCKS: 1929 TO 1948

[In millions of dollars]

YEAR	ALL ESTABLISHMENTS		NONDURABLE GOODS ESTABLISHMENTS		DURABLE GOODS ESTABLISHMENTS		Service and limited function wholesalers' sales
	Sales	Stocks end of period	Sales	Stocks end of period	Sales	Stocks end of period	
1929	37,814	—	29,987	—	7,827	—	30,343
1933	16,550	—	14,002	—	2,548	—	12,950
1935	23,585	—	18,638	—	4,947	—	18,380
1936	28,394	—	21,690	—	6,704	—	22,293
1937	31,780	—	24,027	—	7,762	—	25,026
1938	27,322	2,964	21,520	2,087	5,802	877	21,299
1939	30,057	3,200	22,866	2,238	7,191	962	23,642
1940	33,478	3,357	24,550	2,312	8,928	1,045	26,606
1941	43,805	4,151	31,389	2,896	12,416	1,255	34,300
1942	48,191	3,702	37,557	2,746	10,634	936	36,814
1943	51,957	3,577	42,233	2,696	9,724	881	38,307
1944	54,063	3,686	43,873	2,773	10,190	913	40,825
1945	57,323	4,216	46,514	3,119	10,809	1,097	43,024
1946	73,653	5,823	56,809	4,054	16,844	1,769	56,521
1947	87,646	7,645	65,009	5,021	22,637	2,524	66,221
1948	94,403	8,315	68,722	5,335	26,681	2,980	70,733

Source: Department of Commerce, Office of Business Economics; revised estimates published in August 1948 issue of Survey of Current Business and currently thereafter.

## No. 996.—WHOLESALE TRADE—SUMMARY, BY TYPE OF OPERATION AND KIND OF BUSINESS: 1939

TYPE OF OPERATION AND KIND OF BUSINESS	Num-ber of estab-lishments	Sales (thou-sands of dollars)	Operating expenses, including pay roll (thou-sands of dollars)	Active propri-eces of unin-corpor-ated busi-nesses	Employ-ees, full-time and part-time (average for year) <sup>1</sup>	Total pay roll (thou-sands of dollars) <sup>1</sup>	Stocks on hand end of year, at cost (thou-sands of dollars)
<b>Total</b> .....	200,573	55,265,640	5,518,456	133,698	1,561,948	2,624,203	3,872,385
<b>Service and limited-function wholesalers</b> .....							
Wholesale merchants.....	101,627	23,641,924	3,023,627	72,150	933,239	1,529,598	2,653,420
Wholesale merchants.....	91,323	18,688,897	2,540,959	66,351	805,772	1,287,615	1,995,501
Voluntary group wholesalers.....	703	753,586	85,586	170	30,177	47,308	116,146
Convertors (textile).....	631	425,167	41,152	287	9,190	21,069	63,808
Export merchants.....	586	778,001	59,537	360	9,414	18,848	63,289
Importers.....	2,168	1,379,575	114,418	1,302	22,006	55,411	104,173
Industrial distributors.....	1,471	729,650	121,687	183	40,489	71,011	155,163
Cash-and-carry wholesalers.....	1,198	108,902	5,994	775	2,360	2,335	7,412
Drop shippers or desk jobbers.....	987	474,891	30,380	386	5,148	14,490	703
Wagon distributors.....	2,398	80,259	9,813	2,336	3,285	3,958	1,985
Retailer-cooperative warehouses.....	222	222,996	14,101	—	5,398	8,553	25,150
<b>Manufacturers' sales branches (with stocks)</b> .....	12,977	8,846,940	1,191,188	260	265,602	534,679	681,526
<b>Manufacturers' sales offices (without stocks)</b> .....	5,119	4,679,262	324,175	125	48,739	134,247	—
<b>Petroleum bulk stations and terminals</b> .....	30,825	2,807,908	420,646	23,061	98,816	156,366	235,596
Independent bulk stations.....	6,357	2,627,674	76,126	5,295	21,808	30,900	27,877
Commission stations.....	17,530	2,080,479	3,108,084	17,486	21,579	24,190	71,725
Salary stations.....	6,053	2,1,739,676	205,199	271	47,828	87,983	106,287
Cooperative bulk stations.....	665	2,37,962	5,057	—	2,146	2,946	2,525
Distributing terminals.....	220	2,322,117	26,180	9	5,455	10,347	27,182
<b>Agents and brokers</b> .....	20,903	11,201,035	307,752	18,609	78,511	154,731	72,125
Auction companies.....	649	434,283	14,062	790	10,205	7,828	2,058
Brokers (merchandise).....	4,710	3,390,695	51,327	4,240	10,724	23,828	11,855
Commission merchants.....	2,758	2,748,072	69,163	2,679	16,982	34,018	22,748
Export agents.....	654	571,449	16,501	437	5,034	8,308	3,836
Import agents.....	394	343,105	6,698	289	1,265	3,488	5,741
Manufacturers' agents (with stocks).....	1,907	252,056	29,372	1,379	8,332	16,987	11,894
Manufacturers' agents (without stocks).....	7,871	1,144,961	46,138	7,421	11,170	20,192	—
Selling agents.....	1,487	1,741,777	64,132	959	11,456	33,740	12,910
Other agents.....	473	574,637	10,269	415	3,343	6,392	1,083

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.

<sup>2</sup> Represents commissions only.

<sup>2</sup> Includes taxes.

## No. 996.—WHOLESALE TRADE—SUMMARY, BY TYPE OF OPERATION AND KIND OF BUSINESS: 1939—Continued

TYPE OF OPERATION AND KIND OF BUSINESS	Number of estab- lishments	Sales (thou- sands of dollars)	Operat- ing expenses incl. pay roll (thou- sands of dollars)	Active pro- prietors of unin- corpo- rated busi- nesses	Employ- ees, full- time and part- time (average for year) <sup>1</sup>	Total pay roll (thou- sands of dollars) <sup>1</sup>	Stocks on hand, end of year, at cost (thous- ands of dollars)
<b>Assemblers (mainly farm products)</b>	<b>29,122</b>	<b>3,088,571</b>	<b>251,068</b>	<b>19,493</b>	<b>137,041</b>	<b>114,582</b>	<b>229,718</b>
Assemblers of farm products	9,866	792,159	50,432	10,171	27,614	20,079	110,619
Commission buyers	1,523	121,704	3,941	1,532	1,872	1,453	1,844
Cooperative marketing associations	2,583	611,029	70,048	-----	30,076	34,747	32,729
Cooperative sales agencies	191	578,939	17,572	-----	4,709	7,996	16,599
Cream stations	3,870	48,564	3,901	3,053	2,448	1,702	307
Country grain elevators:							
Independent	3,180	271,154	15,975	2,545	7,572	7,066	20,101
Line	4,061	226,917	15,877	474	8,545	7,711	23,105
Cooperative	1,843	196,430	10,828	-----	5,018	5,300	14,739
Packers and shippers	2,005	241,675	62,494	1,718	30,587	28,450	9,775
<b>SERVICE AND LIMITED-FUNCTION WHOLESALEERS</b>							
<b>Amusement and sporting goods</b>	<b>1,342</b>	<b>151,684</b>	<b>32,000</b>	<b>864</b>	<b>9,436</b>	<b>16,449</b>	<b>22,720</b>
Bicycles and supplies	45	5,219	950	19	350	515	977
Cameras and photographic supplies	113	16,019	3,672	65	1,035	1,802	2,912
Motion picture equipment and supplies (except films)	66	10,197	1,596	15	439	797	1,242
Motion picture film exchanges	214	27,205	6,843	64	1,670	4,127	2,873
Sporting goods	231	36,998	6,855	118	2,089	3,331	6,010
Toys, novelties, and fireworks	534	44,524	9,475	468	3,011	4,488	6,070
All other	139	11,522	2,600	115	833	1,389	2,006
<b>Automotive</b>	<b>7,964</b>	<b>1,995,286</b>	<b>218,578</b>	<b>5,236</b>	<b>72,004</b>	<b>115,136</b>	<b>154,658</b>
Automobiles (new and used)	572	1,324,214	66,762	218	17,391	32,164	31,853
Trucks and tractors	579	70,024	11,822	415	4,005	6,577	8,900
Automotive accessories and equipment	2,860	259,846	60,198	1,851	22,261	33,156	50,027
Automotive parts	3,318	256,748	67,181	2,245	24,808	37,374	51,644
Tires and tubes	635	84,454	12,615	507	3,639	5,865	10,644
<b>Beer, wines, and liquors</b>	<b>6,232</b>	<b>1,249,164</b>	<b>161,598</b>	<b>4,507</b>	<b>45,175</b>	<b>73,677</b>	<b>121,471</b>
Beer and ale	4,812	502,111	77,363	3,854	23,365	31,038	10,860
Wines and liquors	1,420	747,053	84,235	653	21,810	41,739	101,002
<b>Chemicals and paints</b>							
Dyestuffs	1,680	281,002	49,801	785	11,891	24,067	37,619
Explosives	69	28,486	4,947	20	780	2,570	2,770
Industrial chemicals	49	2,824	400	25	119	173	288
Naval stores	287	112,137	15,204	87	2,796	6,047	10,304
Paints and varnishes	29	19,177	2,287	10	378	643	1,459
Paints with glass and/or wallpaper	623	51,608	11,706	328	3,432	5,068	8,166
All other	311	28,675	7,907	130	2,591	4,012	6,220
Clothing and furnishings	312	38,995	7,350	170	1,705	3,754	8,403
Clothing and furnishings (general line)	4,178	700,501	101,023	3,444	26,125	49,471	87,030
Men's and boys'	446	64,127	9,524	428	3,173	4,912	11,041
Women's and children's	1,180	152,944	21,682	1,048	5,791	10,550	23,467
Furs, dressed, and fur clothing	1,110	225,046	35,078	819	8,513	17,200	19,025
Millinery and millinery supplies	501	63,925	7,672	455	1,373	3,422	7,364
Shoes and other footwear	478	76,204	11,978	345	3,458	5,905	8,401
Coal and coke	463	118,256	15,089	349	3,817	7,482	17,132
Drugs (general line)	297	512,835	41,708	293	9,485	19,667	31,641
Service wholesalers (without liquor)	226	363,621	47,410	39	16,710	27,504	56,734
Service wholesalers (with liquor)	45	257,456	34,205	26	12,020	19,743	30,880
Cooperatives and voluntary groups	26	33,836	9,971	8	3,261	5,666	12,251
Drugs and drug sundries (specialty lines)	1,321	157,190	41,614	774	10,965	17,525	20,216
Proprietary medicines	422	46,302	9,747	231	2,883	4,065	6,209
Toiletries	387	49,245	18,570	172	5,244	8,411	5,470
Drug specialties and sundries	512	61,643	13,288	371	2,838	4,449	8,528
Dry goods (general line)	222	206,983	31,213	124	11,035	18,051	39,928
Dry goods (specialty lines)	3,875	981,468	115,502	2,831	29,865	59,032	148,795
Hosiery and lingerie	422	86,204	9,465	303	2,483	4,624	10,040
Notions	973	113,874	21,913	731	7,209	12,330	19,331
Piece goods:							
General line	54	18,493	2,652	47	712	1,388	3,353
Cotton	519	237,647	24,149	350	5,707	12,060	40,432
Silk, linen, rayon, and velvet	801	301,044	28,309	487	6,368	14,440	38,900
Woolen and worsted	366	97,261	10,874	285	2,300	4,692	13,845
Other	407	89,308	12,091	270	3,141	6,369	15,175
Other dry goods specialties	333	37,547	6,049	280	1,855	3,120	6,701

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.

## No. 996.—WHOLESALE TRADE—SUMMARY, BY TYPE OF OPERATION AND KIND OF BUSINESS: 1939—Continued

TYPE OF OPERATION AND KIND OF BUSINESS	Number of establishments	Sales (thousands of dollars)	Operating expenses, incl. pay roll (thousands of dollars)	Active proprietors of unincorporated businesses	Employees, full-time and part-time (average for year) <sup>1</sup>	Total pay roll (thousands of dollars) <sup>1</sup>	Stocks on hand, end of year, at cost (thousands of dollars)
<b>SERVICE AND LIMITED-FUNCTION WHOLESALEERS—continued</b>							
<b>Electrical goods</b>	3,072	788,024	130,660	1,555	37,821	71,599	88,485
Electrical merchandise (general line)	455	300,377	40,271	49	11,706	23,635	26,988
Apparatus and equipment	207	24,214	5,490	124	1,683	3,097	3,039
Wiring supplies and construction materials	955	126,738	22,143	565	7,140	12,053	17,048
Radios and equipment	688	112,435	21,313	438	6,081	10,833	13,575
Refrigerators and equipment (household)	159	118,018	20,116	53	4,813	10,653	9,742
All other	628	106,242	21,327	326	6,398	11,308	13,093
<b>Farm products—raw materials</b>	2,086	1,628,706	112,108	1,569	24,507	37,871	284,679
Cotton	229	408,574	33,919	208	2,808	6,607	74,790
Grains	397	522,447	25,475	210	5,224	8,885	94,216
Hides, skins, and raw furs	686	193,688	14,740	530	3,579	6,564	24,569
Horses and mules	28	7,078	336	33	123	101	225
Livestock	107	8,490	1,076	103	376	347	280
Silk (raw)	15	81,006	2,114	8	188	744	10,752
Tobacco (leaf)	191	86,489	13,084	124	8,088	6,655	32,258
Wool and mohair	168	194,242	12,492	153	1,373	4,291	29,734
All other	267	126,692	8,872	200	2,748	8,477	17,855
<b>Farm products—consumer goods</b>	10,945	2,110,766	274,726	10,296	89,944	132,283	47,466
Dairy products	2,164	485,198	111,486	1,325	33,528	55,504	9,936
Dairy and poultry products	760	241,480	20,918	633	6,936	10,827	9,657
Poultry and poultry products	1,635	241,236	22,216	1,657	8,053	10,058	6,150
Fruits and vegetables (fresh)	5,449	990,528	108,828	5,762	36,391	50,766	20,172
Fresh fruits only	905	146,965	10,701	892	4,150	4,825	1,261
All other	32	5,359	577	27	258	303	290
<b>Farm supplies</b>	1,477	333,844	45,248	1,075	14,405	19,784	44,587
Feed	782	130,190	14,090	642	5,075	6,541	8,503
Fertilizer	99	37,827	5,580	61	613	1,126	7,694
Seeds	415	101,419	18,317	261	6,583	9,096	23,319
All other	181	64,309	6,261	111	2,134	3,021	4,981
<b>Furniture and house furnishings</b>	2,214	373,464	64,405	1,448	17,990	33,372	70,838
China, glassware, and crockery	339	36,777	9,268	208	2,592	4,773	7,004
Floor coverings	487	149,584	20,628	249	5,216	10,696	32,828
Furniture (general line)	49	10,476	2,197	26	754	1,157	1,615
Furniture (household)	333	47,660	9,989	175	2,685	4,910	7,602
Furniture (office)	51	3,052	526	36	166	255	200
House furnishings (except as specified)	827	106,017	16,715	680	4,910	8,707	18,142
Musical instruments and sheet music	128	19,898	5,084	74	1,677	2,874	3,357
<b>Groceries (general line)</b>	3,942	2,185,736	206,862	1,558	75,975	112,922	300,018
Not sponsoring cooperative or voluntary groups	2,780	1,310,164	125,924	1,406	47,391	66,918	177,728
Voluntary group wholesalers	688	658,253	69,582	149	24,385	39,501	101,395
Retail-cooperative warehouses	136	154,051	8,118	-----	3,015	4,808	15,833
Cash-and-carry depots	382	62,668	3,238	3	1,184	1,697	5,057
<b>Groceries and foods (specialty lines)</b>	12,045	1,892,033	266,482	10,450	81,554	124,381	149,628
Breakfast cereals	34	22,777	9,663	8	837	1,372	2,185
Canned foods	430	111,537	11,941	295	3,390	5,668	14,680
Coffee, tea, and spices	703	173,980	30,070	464	7,663	13,605	21,977
Coffee roasting and spice grinding	306	136,988	28,616	162	7,976	12,909	16,761
Confectionery	2,089	132,682	17,494	2,004	6,724	8,051	9,440
Fish and sea foods	1,182	131,248	26,089	981	8,549	12,236	6,601
Flour	323	45,830	5,235	223	1,442	2,340	2,657
Fruits and vegetables (frosted)	32	8,447	832	24	238	402	309
Meats and provisions	2,552	519,593	57,590	2,503	18,032	29,196	10,888
Other food and grocery specialties	4,394	609,650	78,952	3,786	27,103	38,002	64,180
<b>Hardware</b>	1,343	592,000	108,924	607	39,423	64,556	146,595
General line (with industrial department)	409	396,746	72,037	76	26,299	43,558	98,909
General line (without industrial department)	363	142,794	25,310	143	9,404	14,749	35,898
Specialty lines	571	52,460	11,577	388	3,720	6,254	11,788

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.

## No. 996.—WHOLESALE TRADE—SUMMARY, BY TYPE OF OPERATION AND KIND OF BUSINESS: 1939—Continued

TYPE OF OPERATION AND KIND OF BUSINESS	Number of establishments	Sales (thousands of dollars)	Operating expenses, incl. pay roll (thousands of dollars)	Active proprietors of unincorporated businesses	Employees, full-time and part-time (average for year) <sup>1</sup>	Total pay roll (thousands of dollars) <sup>1</sup>	Stocks on hand end of year, at cost (thousands of dollars)
<b>SERVICE AND LIMITED-FUNCTION WHOLE-SALERS—continued</b>							
Jewelry	1,805	234,054	41,147	1,564	9,726	19,741	56,172
Jewelry (general line)	195	62,312	10,608	130	2,649	5,514	14,759
Clocks and watches	178	44,653	8,418	131	1,366	3,398	5,122
Diamonds and other precious stones	427	46,873	4,810	429	729	1,059	19,375
All other	1,005	80,216	17,251	865	4,982	8,870	16,916
Lumber and construction materials	3,303	804,392	122,630	1,498	35,961	63,029	80,308
Builders' supplies (general line)	189	67,773	10,722	74	4,061	5,822	8,426
Lumber	1,236	378,222	41,974	648	10,770	20,160	29,315
Lumber and millwork	154	50,376	7,401	61	2,384	4,147	6,187
Millwork	280	59,012	12,029	90	4,186	7,763	11,067
Brick, tile, and terra cotta	145	18,700	2,048	73	714	1,422	1,231
Cement, lime, and plaster	102	22,532	3,511	27	900	1,693	750
Glass	282	32,143	9,421	171	3,451	5,907	6,254
All other	915	175,634	33,724	345	9,495	16,115	17,008
Machinery, equipment, and supplies	9,743	1,281,692	257,594	5,501	78,309	140,672	208,681
Commercial equipment and supplies:							
Office machines and equipment	216	22,201	5,215	157	2,102	2,938	3,184
Restaurant and hotel supply houses	438	48,208	11,406	322	3,936	6,218	8,192
Garage and filling station equipment	169	9,877	2,537	127	854	1,339	1,327
Soda fountain equipment and supplies	29	1,846	431	24	125	183	201
Store machines	49	2,961	484	42	170	232	231
Store fixtures and equipment	401	20,790	5,628	230	1,847	3,158	2,333
All other	341	30,759	6,516	221	2,145	3,602	3,090
Farm and dairy:							
Dairy equipment	100	10,705	3,606	61	997	1,864	2,072
Farm implements	21	2,065	640	14	237	385	625
Farm machinery and equipment	189	36,725	5,527	88	1,542	2,015	4,703
Industrial machinery, equipment, and supplies:							
Industrial (general line)	116	70,267	13,230	27	4,004	7,770	13,814
Belting, hose, and packing	211	18,837	4,576	95	1,273	2,568	2,216
Construction (except road building)	153	23,943	5,422	49	1,002	3,266	4,655
Road building	251	72,613	14,003	95	3,420	7,259	11,247
Machine tools	128	27,609	4,428	76	1,082	2,473	3,140
Mine and mill supplies	415	99,851	19,110	167	5,871	10,883	18,173
Oil well supply houses	896	179,770	18,827	218	5,137	9,343	31,318
Power plant and power transmission	89	11,632	2,110	40	631	1,291	1,350
Printing and lithographing (except paper)	157	12,797	3,734	106	1,295	2,277	1,968
Rope, cordage, and twine	57	13,441	1,916	21	501	1,023	1,408
Textile	84	10,359	2,308	40	667	1,233	1,705
Used machinery and equipment	290	16,125	4,335	250	1,423	2,191	3,606
All other	1,575	180,158	36,330	942	10,680	19,970	26,013
Professional equipment and supplies:							
Dental supply houses	330	33,788	9,674	155	3,400	5,567	8,064
Religious supply houses	94	8,325	2,270	73	720	1,220	2,281
School equipment and supplies	138	22,271	5,515	72	1,927	2,833	3,630
Surgical, medical, and hospital	383	51,512	13,624	183	4,233	8,337	9,199
All other	117	14,642	3,503	58	1,176	2,071	3,030
Service equipment and supplies:							
Barber and beauty supply houses	859	44,593	14,402	677	5,112	7,340	9,060
Laundry and dry cleaning	206	35,001	7,257	82	1,831	3,701	3,681
Tailors' supplies	64	2,809	565	67	203	280	598
Undertakers' supplies	107	4,545	1,277	66	417	616	741
Upholsterers' supplies	210	29,717	6,972	114	1,912	3,563	6,611
All other	607	35,608	8,583	444	3,111	4,998	5,909
Transportation equipment and supplies:							
Aircraft and aeronautical	13	18,039	1,114	1	305	580	1,439
Railroad	68	25,055	6,004	19	854	2,982	3,314
Marine	149	21,020	4,284	62	1,295	2,407	4,298
Other	14	968	223	7	84	114	203

<sup>1</sup> Employees and payroll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.

## No. 996.—WHOLESALE TRADE—SUMMARY, BY TYPE OF OPERATION AND KIND OF BUSINESS: 1939—Continued

TYPE OF OPERATION AND KIND OF BUSINESS	Number of establishments	Sales (thousands of dollars)	Operating expenses, including pay roll (thousands of dollars)	Active proprietors of unincorporated businesses	Employees, full-time and part-time (average for year) <sup>1</sup>	Total pay roll (thousands of dollars) <sup>1</sup>	Stocks on hand, end of year, at cost (thousands of dollars)
<b>SERVICE AND LIMITED-FUNCTION WHOLE-SALERS—continued</b>							
<b>Metals and metal work (except scrap)....</b>	1,017	515,975	61,660	479	16,390	32,620	63,741
Building metal work.....	135	13,280	2,709	95	1,003	1,482	1,779
Iron and steel products (general line).....	96	139,442	17,515	30	4,547	9,588	16,385
Iron and steel products (semifinished).....	63	15,337	2,727	20	653	1,463	2,405
Iron and steel products (flat).....	204	73,392	14,574	69	3,803	7,455	15,016
Wire and wire products.....	65	7,147	1,545	33	431	777	1,202
Iron and steel finished products, n. e. c. ....	290	55,833	11,641	157	3,427	6,372	9,787
Copper.....	38	49,545	2,050	19	455	1,093	3,813
All other.....	126	161,990	8,898	51	2,071	4,390	13,384
<b>Paper and its products.....</b>	2,898	574,973	99,217	1,693	30,913	56,490	74,566
Wrapping or coarse paper and products.....	1,075	297,438	51,255	1,126	16,437	29,129	42,108
Printing and writing papers.....	427	210,261	29,880	121	8,163	17,765	22,137
Stationery and stationery supplies.....	515	46,551	11,149	330	4,189	6,376	5,932
Wallpaper.....	281	20,723	6,933	116	2,124	3,220	4,389
<b>Petroleum and its products.....</b>	1,275	196,734	25,207	817	6,530	11,525	10,408
<b>Plumbing and heating equipment and supplies.....</b>	2,225	379,975	69,952	1,036	21,956	37,474	63,181
Plumbing and heating (general line).....	675	185,102	32,118	207	10,243	17,206	31,590
Heating (including stoves and ranges).....	368	36,058	8,581	190	2,648	4,609	4,587
Plumbing fixtures, equipment, and supplies.....	927	134,095	23,366	506	7,350	12,407	24,147
All other.....	255	24,720	5,887	133	1,715	3,252	2,857
<b>Tobacco and products (except leaf)....</b>	2,717	1,106,215	54,074	2,327	18,480	26,946	49,427
<b>Waste materials.....</b>	6,059	656,000	96,470	5,956	42,026	46,040	57,201
Iron and steel scrap.....	1,869	334,136	42,382	1,741	15,889	18,949	22,808
Junk and scrap (general line).....	1,893	93,031	17,251	2,060	9,562	8,330	10,484
Waste paper, rags, and rubber.....	1,128	135,305	25,131	1,002	11,682	13,169	13,578
Nonferrous metals.....	395	50,137	5,239	381	2,079	2,549	4,425
All other.....	774	43,391	6,467	772	2,808	3,043	5,958
<b>All other products.....</b>	5,431	1,387,607	145,814	3,814	48,244	77,714	142,224
Books, periodicals, and newspapers.....	866	108,572	30,662	407	12,546	17,388	9,300
Flowers and nursery stock.....	734	42,987	8,634	679	2,901	4,365	2,426
Forest products (except lumber).....	694	49,794	8,947	505	3,308	4,196	5,467
General merchandise.....	156	515,937	29,616	93	9,256	16,068	34,216
Leather and shoe findings.....	955	116,302	14,802	806	3,994	6,914	20,842
Leather goods.....	145	13,078	2,783	96	883	1,664	2,397
Oils and greases (animal and vegetable).....	87	71,051	5,529	31	844	2,457	9,688
Optical goods.....	572	42,317	15,176	225	6,280	9,007	6,629
Textiles and materials (other than dry goods).....	301	51,782	5,971	264	2,453	3,406	8,232
Yarns.....	181	73,797	6,571	120	1,370	3,014	9,719
Miscellaneous kinds of business.....	840	241,330	17,033	498	4,400	8,635	33,308
<b>MANUFACTURERS' SALES BRANCHES (WITH STOCKS)</b>							
Amusement and sporting goods.....	398	270,825	34,746	2	12,154	21,208	13,831
Automotive.....	937	725,709	80,277	12	22,417	45,980	75,410
Bear, wine, and liquors.....	409	274,265	52,285	5	6,341	15,532	10,810
Chemicals and paints.....	668	556,135	82,460	9	13,995	33,163	44,524
Clothing and furnishings.....	297	300,302	39,108	59	8,071	18,161	32,929
Coal and coke.....	6	6,461	1,279	-----	250	455	1,364
Drugs and drug sundries.....	237	202,097	55,832	4	8,439	18,260	19,007
Dry goods (specialty lines).....	213	210,082	23,519	17	5,624	13,036	29,319
Electrical goods.....	303	643,067	49,106	4	12,546	29,274	29,266
Farm products—consumer goods.....	610	199,200	34,299	3	6,619	11,321	11,313
Farm supplies.....	122	52,472	7,184	6	1,501	2,723	2,957
Furniture and house furnishings.....	285	131,625	18,436	4	3,975	8,634	11,724
Groceries and foods (specialty lines).....	2,592	2,333,306	250,640	31	57,074	104,219	93,974
Hardware.....	98	24,412	4,864	-----	1,459	2,728	3,461
Jewelry.....	31	53,478	4,055	1	879	2,183	3,303
Lumber and construction materials.....	353	238,475	33,618	13	9,286	18,350	23,484
Machinery, equipment, and supplies.....	3,338	976,464	192,008	45	53,586	108,340	135,634
Metals and metal work (except scrap).....	481	469,922	38,680	2	9,634	19,492	52,412
Paper and its products.....	317	177,454	29,303	1	6,051	12,183	14,361
Petroleum and its products.....	56	21,262	4,596	-----	894	2,236	2,466
Plumbing and heating equipment and supplies.....	519	251,633	39,037	9	10,115	18,479	30,433
Tobacco and products (except leaf).....	44	446,489	62,051	6	4,353	8,437	11,769
All other products.....	583	281,805	38,805	27	9,780	20,276	27,766

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.

## No. 996.—WHOLESALE TRADE—SUMMARY, BY TYPE OF OPERATION AND KIND OF BUSINESS: 1939—Continued

TYPE OF OPERATION AND KIND OF BUSINESS	Num ber of estab lish ments	Sales (thou sand s of dollar s)	Operat ing expenses, including pay roll (thou sand s of dollar s)	Acti ve pro priet ors of unincor porated busi nesses	Employ ees, full time and part time (average for year) <sup>1</sup>	Total pay roll (thou sand s of dollar s)	Stocks on hand end of year, at cost (thou sand s of dollar s)
<b>MANUFACTURERS' SALES OFFICES (WITHOUT STOCKS)</b>							
Amusement and sporting goods.....	66	49,731	5,727	-----	1,492	3,156	-----
Automotive.....	59	65,369	6,842	-----	870	2,308	-----
Beer, wines, and liquors.....	89	132,530	17,738	-----	1,647	4,541	-----
Chemicals and paints.....	181	248,997	39,683	7	4,035	11,188	-----
Clothing and furnishings.....	241	121,306	12,309	63	2,166	6,440	-----
Coal and coke.....	5	16,199	453	-----	56	245	-----
Drugs and drug sundries.....	54	50,153	11,166	6	1,041	2,085	-----
Dry goods (specialty lines).....	131	220,664	11,877	5	2,019	6,070	-----
Electrical goods.....	252	217,758	10,252	3	1,727	5,475	-----
Farm products—consumer goods.....	75	21,682	2,208	3	325	548	-----
Farm supplies.....	20	11,696	827	-----	142	422	-----
Furniture and house furnishings.....	131	67,340	6,836	12	969	2,878	-----
Groceries and foods (specialty lines).....	810	346,375	60,514	3	7,391	15,068	-----
Hardware.....	55	16,088	1,357	2	230	713	-----
Jewelry.....	29	9,569	628	4	105	446	-----
Lumber and construction materials.....	334	260,790	27,520	4	4,480	12,777	-----
Machinery, equipment, and supplies.....	1,094	505,669	41,380	6	7,658	21,928	-----
Metals and metal work (except scrap).....	530	1,647,674	34,598	-----	6,003	19,077	-----
Paper and its products.....	309	187,434	10,263	1	2,002	6,442	-----
Petroleum and its products.....	21	10,620	3,809	-----	306	902	-----
Plumbing and heating equipment and supplies.....	210	41,789	5,631	1	1,116	2,781	-----
Tobacco and products (except leaf).....	136	279,863	3,118	1	1,074	2,131	-----
All other products.....	287	140,466	9,439	4	1,876	4,727	-----
<b>PETROLEUM BULK STATIONS AND TERMINALS</b>							
Petroleum and its products.....	30,825	3,807,908	420,646	23,061	98,816	156,366	235,506
<b>AGENTS AND BROKERS</b>							
Amusement and sporting goods.....	192	20,088	1,497	172	330	613	360
Automotive.....	331	121,426	3,645	289	846	1,856	648
Beer, wines, and liquors.....	102	30,051	1,167	79	270	471	861
Chemicals and paints.....	331	116,246	5,000	242	947	2,514	1,127
Clothing and furnishings.....	1,409	439,389	13,895	1,375	3,601	6,987	1,075
Coal and coke.....	305	404,260	17,633	77	2,752	8,206	3,010
Drugs and drug sundries.....	147	34,546	3,005	114	760	1,518	302
Dry goods (general line).....	27	219,694	2,136	24	724	1,474	106
Dry goods (specialty lines).....	1,470	1,433,117	36,706	1,302	6,833	20,870	5,267
Electrical goods.....	837	130,532	7,098	737	1,855	3,342	880
Farm products—raw materials.....	3,091	2,960,687	51,413	3,376	21,136	24,450	23,653
Farm products—consumer goods.....	1,287	731,026	27,134	1,113	6,750	13,339	3,200
Farm supplies.....	198	103,108	2,600	145	525	1,349	315
Furniture and house furnishings.....	789	100,956	6,602	713	1,744	3,206	682
Groceries and foods (specialty lines).....	2,729	2,085,424	36,879	2,422	8,185	17,781	12,258
Hardware.....	392	61,860	2,920	301	757	1,365	309
Jewelry.....	210	18,737	916	204	150	320	221
Lumber and construction materials.....	944	213,760	10,833	752	2,261	4,928	709
Machinery, equipment, and supplies.....	2,890	366,685	32,641	2,361	8,499	18,363	6,299
Metals and metal work (except scrap).....	608	359,125	7,648	522	1,611	3,990	3,135
Paper and its products.....	470	98,607	5,043	362	1,097	2,604	777
Petroleum and its products.....	146	91,930	2,590	88	386	1,128	78
Plumbing and heating equipment and supplies.....	512	53,200	3,865	450	1,062	1,841	626
Tobacco and products (except leaf).....	25	16,135	577	32	272	207	124
Waste materials.....	121	74,181	3,032	82	350	1,152	1,200
All other products.....	1,340	911,286	21,271	1,125	4,700	10,000	4,652
<b>ASSEMBLERS (MAINLY FARM PRODUCTS)</b>							
Farm products—raw materials.....	15,639	1,809,317	86,059	8,776	43,368	38,884	105,530
Farm products—consumer goods.....	12,132	1,148,158	143,775	9,444	78,777	65,867	21,711
Farm supplies.....	482	35,283	3,601	444	1,589	1,406	3,700
Groceries and foods (specialty lines).....	819	92,618	17,309	804	13,093	8,141	8,211
All other products.....	50	3,195	424	25	214	284	411

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.

## No. 997.—WHOLESALE TRADE—SUMMARY FOR 27 CITIES: 1939

[Sales, expenses, pay roll, and stocks in thousands of dollars. The wholesale-trade centers covered in the following table were selected on the basis of their volume of wholesale trade in 1935]

CITY	Number of establish- ments	SALES		Oper- ating expenses (includ- ing pay roll)	Active pro- prietors of unincor- porated busi- nesses	Em- ployees, full- time and part- time (aver- age for year) <sup>1</sup>	PAY ROLL <sup>1</sup>			Stocks on hand, end of year, at cost
		Amount	Percent gain over 1935				Total	Full- time	Part- time	
Atlanta, Ga.	989	465,115	41.6	50,592	489	12,473	22,215	21,977	238	27,121
Baltimore, Md.	1,664	578,628	36.3	58,009	1,219	17,715	28,222	27,696	526	35,053
Boston, Mass.	3,361	1,634,784	23.0	150,025	1,737	26,298	75,002	73,974	1,028	107,799
Buffalo, N. Y.	1,021	430,270	22.9	38,332	527	10,630	19,089	19,741	248	27,014
Chicago, Ill.	7,799	4,080,415	24.8	396,914	4,743	95,494	190,205	188,073	2,132	204,908
Cincinnati, Ohio.	1,533	647,187	35.6	56,905	995	14,472	27,170	26,810	360	33,202
Cleveland, Ohio.	2,226	946,653	39.0	89,402	1,077	23,539	47,127	46,357	770	44,601
Dallas, Tex.	1,043	475,454	16.1	52,073	577	13,018	21,741	21,431	310	51,617
Denver, Colo.	993	340,980	30.4	33,764	636	9,930	16,408	16,193	215	19,845
Detroit, Mich.	2,763	1,304,451	37.2	102,770	1,811	27,350	53,087	53,884	553	48,335
Houston, Tex.	845	457,911	38.3	44,617	419	10,904	18,080	18,523	457	43,576
Indianapolis, Ind.	846	374,483	22.3	32,925	475	10,056	17,268	17,041	227	18,470
Kansas City, Mo.	1,474	762,069	17.3	67,301	947	17,829	31,141	30,587	554	44,254
Los Angeles, Calif.	4,808	1,285,265	36.8	146,250	3,758	41,411	73,751	72,439	1,312	102,682
Memphis, Tenn.	675	433,254	13.7	32,478	461	8,937	13,675	13,454	221	36,847
Milwaukee, Wis.	1,455	412,366	19.6	41,993	707	12,007	22,824	22,534	290	30,178
Minneapolis and St. Paul, Minn. (com- bined)	1,005	941,390	19.4	91,607	1,162	24,154	43,571	42,990	581	95,077
Newark, N. J.	1,006	397,832	47.4	45,828	601	13,000	24,328	24,099	229	25,654
New Orleans, La.	1,022	437,039	7.8	42,929	556	14,424	21,440	20,853	587	44,865
New York, N. Y.	24,042	12,954,252	34.7	1,148,338	15,827	241,405	544,796	540,154	4,642	776,429
Omaha, Nebr.	678	390,754	13.4	27,910	397	8,131	13,146	12,987	159	20,580
Philadelphia, Pa.	4,073	1,622,100	22.4	157,478	3,190	42,257	77,824	76,629	1,195	94,677
Pittsburgh, Pa.	1,745	832,069	33.9	79,099	1,191	20,787	39,519	38,932	587	37,061
Portland, Oreg.	956	317,326	18.9	35,293	433	10,337	18,196	17,800	396	23,351
St. Louis, Mo.	2,663	1,164,102	31.9	128,315	1,464	34,367	61,253	60,797	456	89,425
San Francisco, Calif.	3,359	1,377,614	24.4	161,366	2,643	34,612	70,999	69,741	1,258	112,678
Seattle, Wash.	1,500	451,292	36.9	50,438	716	13,449	24,957	24,436	521	33,878

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.

Source: Department of Commerce, Bureau of the Census; Census of Business, 1939, Vol. II, Wholesale Trade.

## No. 998.—WHOLESALE TRADE—EMPLOYMENT BY SIZE OF ESTABLISHMENT, BASED ON NUMBER EMPLOYED: 1939

NUMBER OF EMPLOYEES PER ESTABLISHMENT	ESTABLISHMENTS		Number of employees
	Number	Percent of total	
	200,573	100.0	
Total.....			1,561,948
100 or more.....	1,396	.7	264,845
20-99.....	16,060	8.0	604,226
10-19.....	20,581	10.3	278,402
8-9.....	8,597	4.3	72,643
6-7.....	14,712	7.3	94,737
4-5.....	23,218	11.6	102,979
3.....	18,762	9.4	56,044
2.....	25,729	12.8	51,153
1 <sup>1</sup> .....	39,558	19.7	36,919
No paid employees.....	31,960	15.9	-----

<sup>1</sup> Or fraction on monthly average basis.

Source: Department of Commerce, Bureau of the Census; Census of Business, 1939, Vol. II, Wholesale Trade.

## DISTRIBUTION AND SERVICES

No. 999.—WHOLESALE TRADE—SUMMARY, BY STATES: 1929, 1935, AND 1939

DIVISION AND STATE	NUMBER OF ESTABLISHMENTS			SALES (THOUSANDS OF DOLLARS)			OPERATING EXPENSES, INCLUDING PAY ROLL (THOUSANDS OF DOLLARS)		
	1929	1935	1939	1929	1935	1939	1929	1935	1939
	United States	168,820	176,756	200,573	66,983,024	42,802,913	55,265,640	6,025,583	4,163,480
New England	9,756	9,580	10,107	4,005,910	2,528,497	3,171,487	418,535	265,606	339,782
Maine	986	970	1,032	175,853	127,840	105,848	23,516	17,225	22,304
New Hampshire	325	363	363	60,500	54,069	64,263	8,100	6,562	8,234
Vermont	308	344	383	57,393	53,567	57,112	6,876	7,295	7,778
Massachusetts	6,038	5,739	5,960	2,948,372	1,806,346	2,232,117	295,127	173,736	225,469
Rhode Island	734	683	762	275,357	180,597	239,013	28,077	21,307	25,175
Connecticut	1,365	1,481	1,607	488,435	306,078	413,134	56,639	39,481	50,832
Middle Atlantic	38,045	40,392	45,370	22,702,703	14,296,623	18,931,269	1,960,369	1,364,970	1,804,095
New York	25,202	26,915	30,389	17,143,753	10,846,966	14,508,479	1,416,070	1,005,722	1,327,320
New Jersey	2,334	3,025	3,531	935,521	708,645	1,075,302	110,901	90,195	131,758
Pennsylvania	10,509	11,452	14,420	4,623,429	2,741,012	3,347,488	433,398	260,053	345,008
E. North Central	32,058	35,638	40,634	13,445,712	8,709,015	11,228,015	1,312,127	836,217	1,099,196
Ohio	8,035	9,086	9,588	2,925,525	2,028,552	2,030,784	297,805	211,280	263,441
Indiana	3,726	4,333	4,842	888,816	654,917	847,035	82,615	64,391	87,433
Illinois	11,556	12,009	14,498	6,075,726	3,937,609	4,998,766	652,334	355,797	481,305
Michigan	5,239	6,065	6,908	2,027,341	1,410,767	1,026,474	181,373	132,112	181,782
Wisconsin	3,502	4,144	4,798	928,304	677,170	824,956	97,910	72,057	85,235
W. North Central	28,629	29,526	33,136	8,454,665	4,786,928	5,808,272	655,460	431,591	542,508
Minnesota	5,243	5,695	6,460	1,667,535	1,188,413	1,458,224	127,248	102,970	130,412
Iowa	4,946	5,063	5,802	1,043,316	827,795	790,518	80,817	51,254	69,088
Missouri	6,649	6,691	7,649	3,306,536	1,811,544	2,261,260	291,870	179,001	227,984
North Dakota	2,618	2,435	2,652	261,131	133,808	170,262	10,845	14,334	16,605
South Dakota	1,972	1,899	2,022	236,085	99,262	133,306	16,517	12,267	12,708
Nebraska	2,886	3,122	3,391	1,053,441	527,719	566,975	61,282	37,672	45,270
Kansas	4,315	4,621	5,130	886,611	398,387	427,651	57,875	34,093	40,443
South Atlantic	15,592	15,367	17,426	4,485,643	3,406,153	4,566,652	415,194	328,566	481,127
Delaware	286	282	316	118,087	106,300	157,474	7,320	10,061	21,858
Maryland	2,198	2,316	2,464	711,412	496,017	688,989	70,203	51,880	69,647
Dist. of Columbia	492	629	753	223,401	242,729	347,772	23,583	23,903	33,411
Virginia	2,331	2,123	2,432	621,139	502,951	627,632	64,293	49,621	70,608
West Virginia	1,127	1,251	1,424	341,433	231,076	284,196	36,751	26,956	35,030
North Carolina	2,403	2,458	2,859	695,118	555,396	831,251	58,640	43,795	70,346
South Carolina	1,539	1,422	1,450	332,528	267,122	297,211	22,038	17,734	22,991
Georgia	3,175	2,667	3,032	997,447	605,272	806,238	77,187	58,006	80,481
Florida	2,041	2,239	2,698	444,078	399,290	525,889	55,172	46,521	75,756
E. South Central	7,719	7,594	8,198	2,496,685	1,609,657	1,964,803	188,551	136,436	180,560
Kentucky	2,024	2,057	2,174	500,389	379,597	464,432	46,930	35,391	49,833
Tennessee	2,246	2,626	2,656	1,044,945	745,009	830,529	73,349	57,258	69,911
Alabama	1,737	1,668	1,943	566,403	304,549	415,688	45,308	20,750	41,040
Mississippi	1,712	1,243	1,425	384,948	179,902	245,154	22,874	14,037	10,707
W. South Central	17,526	15,056	18,470	4,739,143	2,696,574	3,457,385	370,047	251,415	339,691
Arkansas	2,045	1,504	1,785	306,510	180,309	248,916	25,308	16,761	21,826
Louisiana	1,726	2,131	2,391	830,965	580,260	706,402	68,063	55,493	68,065
Oklahoma	4,108	3,668	3,998	769,696	404,405	461,519	63,878	36,221	46,213
Texas	9,587	7,753	10,296	2,771,972	1,531,540	2,040,548	212,738	142,040	203,587
Mountain	5,777	6,413	7,300	1,173,657	847,030	1,088,587	114,113	88,458	119,078
Montana	1,243	1,264	1,336	158,227	121,641	130,584	14,342	11,088	13,523
Idaho	673	954	989	97,157	82,195	105,510	9,628	9,380	12,421
Wyoming	283	337	397	34,661	25,698	37,031	3,534	2,866	3,984
Colorado	2,075	1,884	2,296	539,626	324,882	435,126	48,363	30,808	44,356
New Mexico	315	397	542	543,143	45,579	66,387	5,119	4,685	7,707
Arizona	356	541	607	97,024	78,046	96,528	11,031	9,347	12,633
Utah	736	888	957	180,101	154,189	194,172	20,387	17,049	21,326
Nevada	96	158	176	13,718	15,300	23,240	1,719	2,375	3,068
Pacific	18,718	17,190	19,932	5,478,906	3,922,436	5,049,170	591,187	460,221	612,419
Washington	2,588	3,233	3,584	959,164	603,740	767,731	102,866	68,709	91,035
Oregon	1,437	1,615	1,934	465,196	343,443	441,310	51,038	36,550	49,308
California	9,693	12,342	14,414	4,054,540	2,975,253	3,840,129	437,283	354,002	471,116

## No. 999.—WHOLESALE TRADE—SUMMARY, BY STATES: 1929, 1935, AND 1939—Continued

DIVISION AND STATE	ACTIVE PROPRIETORS OF UNINCORPORATED BUSINESSES	EMPLOYEES, FULL-TIME AND PART-TIME (AVERAGE FOR YEAR) <sup>1</sup>			TOTAL PAY ROLL (THOUSANDS OF DOLLARS) <sup>1</sup>			STOCKS ON HAND, END OF YEAR, AT COST (THOUSANDS OF DOLLARS)
		1929	1935	1939	1929 <sup>2</sup>	1935 <sup>2</sup>	1939 <sup>2</sup>	
		90,740	97,225	133,698	1,510,494	1,260,553	1,561,948	3,872,385
<b>United States.</b>								
New England	4,897	5,166	5,476	106,152	81,521	94,134	203,583	134,822
Maine	542	504	608	7,214	6,271	7,286	11,202	8,427
New Hampshire	182	172	198	2,265	2,149	2,634	3,607	3,044
Vermont	192	140	209	1,898	2,188	2,355	2,899	2,952
Massachusetts	2,848	3,215	3,190	70,142	51,888	59,155	143,777	90,110
Rhode Island	432	369	456	7,516	6,328	7,430	14,534	9,936
Connecticut	701	766	815	17,117	12,727	15,376	27,504	20,353
Middle Atlantic	24,424	25,436	30,176	410,399	351,555	428,388	952,754	662,736
New York	17,136	16,026	19,577	274,699	243,120	292,807	683,526	487,139
New Jersey	1,169	1,570	1,928	26,578	26,386	36,609	54,648	43,225
Pennsylvania	6,119	7,240	8,071	109,122	82,049	98,972	214,841	132,372
East North Central								
Ohio	4,104	5,323	6,021	79,075	68,304	75,975	151,481	109,535
Indiana	2,180	2,183	3,358	24,311	23,263	28,555	42,581	32,469
Illinois	5,943	6,611	9,955	158,043	104,740	122,741	338,395	182,989
Michigan	2,545	3,580	4,878	44,584	41,587	52,292	94,052	65,653
Wisconsin	1,543	2,035	3,017	28,820	24,936	26,728	50,518	37,394
West North Central								
Minnesota	12,931	13,745	21,845	187,276	144,219	166,649	322,642	208,755
Iowa	2,329	2,585	4,077	36,054	32,079	37,523	62,428	49,564
Missouri	2,560	2,019	4,307	20,748	19,753	24,120	40,839	25,515
North Dakota	3,058	3,740	5,202	77,329	56,576	64,373	144,167	87,798
South Dakota	627	588	1,300	5,917	4,935	5,901	9,935	6,395
Nebraska	444	534	1,100	5,352	4,478	4,697	8,614	5,469
Kansas	2,332	2,076	3,521	18,994	16,882	13,672	15,038	28,047
South Atlantic	8,973	8,546	11,759	122,630	117,143	122,021	197,200	154,894
Delaware	200	148	189	2,118	1,890	2,946	3,778	3,175
Maryland	1,512	1,744	1,906	21,712	19,164	23,533	32,752	23,456
District of Columbia	267	327	437	6,756	8,274	10,250	12,666	13,819
Virginia	1,027	1,065	1,500	20,139	18,846	28,236	29,575	33,971
West Virginia	503	617	757	10,047	8,835	11,525	20,216	13,161
North Carolina	1,625	1,400	2,075	15,745	16,980	30,347	25,679	20,456
South Carolina	1,053	809	1,102	6,113	6,128	8,241	10,535	7,630
Georgia	1,900	1,371	2,094	21,275	18,444	24,501	36,728	25,601
Florida	826	1,005	1,699	18,725	18,573	32,442	26,271	21,845
East South Central								
Kentucky	4,916	4,329	6,292	58,388	51,445	68,900	94,377	65,345
Tennessee	1,437	1,240	1,873	17,725	15,765	19,499	25,872	18,041
Alabama	1,547	1,536	1,912	20,981	19,920	23,171	34,434	27,226
Mississippi	1,034	920	1,571	13,428	10,675	14,202	23,551	14,201
West South Central								
Arkansas	10,111	7,618	13,298	99,104	80,237	111,952	167,831	107,293
Louisiana	877	747	1,468	7,797	6,006	7,890	11,949	7,347
Oklahoma	2,061	1,792	2,769	18,268	12,809	15,569	30,784	23,873
Texas	5,644	4,141	7,627	56,002	44,050	64,479	95,846	58,470
Mountain	2,246	2,323	4,609	32,398	28,615	37,467	55,569	41,310
Montana	275	225	599	4,133	4,040	4,132	6,979	5,904
Idaho	291	360	606	3,273	3,372	4,695	4,479	4,025
Wyoming	93	123	312	871	874	1,210	1,855	1,224
Colorado	893	830	1,576	13,869	10,102	13,675	23,947	15,064
New Mexico	103	141	414	1,257	1,433	2,403	2,318	2,066
Arizona	157	239	390	2,976	2,670	3,854	5,407	3,922
Utah	402	357	604	5,544	5,475	6,705	9,712	8,046
Nevada	32	48	108	477	640	733	877	1,060
Pacific	5,927	10,330	18,414	159,314	142,898	181,146	291,841	219,064
Washington	953	1,206	1,820	27,795	22,725	27,425	50,972	34,690
Oregon	631	674	1,025	14,055	11,316	15,443	24,056	17,625
California	4,343	8,450	10,569	117,464	108,857	138,278	216,813	166,749

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.<sup>2</sup> Figures for 1935 and 1939 are monthly averages; those for 1929 are quarterly averages.<sup>3</sup> Does not include data for commission bulk tank stations.

## No. 1000.—RETAIL TRADE—SALES, BY KIND-OF-BUSINESS GROUPS; AND TOTAL INVENTORIES: 1929 TO 1948

[Millions of dollars]

KIND-OF-BUSINESS GROUP	1929	1933	1935	1939	1943	1944	1945	1946	1947	1948
All retail stores.....	148,459	24,517	32,791	42,042	63,721	69,573	76,644	100,787	118,328	129,951
Durable goods stores.....	14,180	4,844	7,626	10,379	9,755	10,468	11,960	21,761	30,392	36,304
Automotive group.....	7,043	2,368	4,237	5,549	3,142	3,315	3,805	8,808	13,778	17,591
Motor vehicle dealers.....	6,444	2,142	3,863	5,025	2,394	2,465	2,741	7,145	12,100	15,780
Parts and accessories.....	599	226	374	524	748	850	1,064	1,663	1,678	1,811
Building materials and hardware group.....	3,846	1,342	1,864	2,735	3,391	3,717	4,271	6,750	9,092	10,834
Building materials.....	2,621	854	1,105	1,761	2,079	2,171	2,508	4,137	5,695	6,869
Farm implements.....	519	177	202	345	410	530	586	787	1,180	1,555
Hardware.....	706	311	467	620	902	1,007	1,177	1,826	2,217	2,410
Home furnishings group.....	2,755	959	1,200	1,733	2,258	2,454	2,813	4,860	6,213	6,676
Furniture and house furnishings.....	1,813	646	852	1,200	1,785	1,951	2,145	3,175	3,746	3,948
Household appliances and radios.....	942	313	438	533	473	503	608	1,085	2,407	2,728
Jewelry.....	536	175	235	362	964	982	1,071	1,343	1,309	1,203
Nondurable goods stores.....	34,279	19,673	25,165	31,663	53,966	59,105	64,684	79,026	87,936	93,647
Apparel group.....	4,241	1,930	2,656	3,250	6,323	6,860	7,685	8,981	9,413	9,867
Men's clothing and furnishings.....	1,358	542	727	840	1,497	1,618	1,806	2,227	2,414	2,413
Women's apparel and accessories.....	1,480	754	1,026	1,323	2,803	3,103	3,589	4,033	4,141	4,530
Family and other apparel.....	596	209	392	479	907	986	1,093	1,262	1,325	1,387
Shoes.....	807	425	511	617	1,026	1,272	1,197	1,450	1,533	1,637
Drug stores.....	1,690	1,068	1,233	1,563	2,588	2,811	3,023	3,520	3,650	3,687
Eating and drinking places.....	2,125	1,430	2,391	3,520	8,034	9,351	10,809	12,362	12,485	12,612
Food group.....	10,967	6,776	8,302	10,165	17,075	18,540	19,727	25,005	29,584	31,857
Grocery and combination.....	7,353	5,004	6,352	7,722	12,901	14,062	14,863	19,144	23,164	25,012
Other food.....	3,614	1,772	2,010	2,443	4,174	4,478	4,864	5,861	6,420	6,845
Filling stations <sup>2</sup> .....	1,787	1,532	1,968	2,822	2,453	2,604	3,016	4,065	5,193	6,325
General merchandise group.....	9,015	4,982	5,730	6,475	9,977	10,890	11,689	14,611	16,003	16,002
Department, including mail order.....	4,350	2,538	3,311	3,975	6,132	6,764	7,428	9,621	10,615	11,322
General, including general merchandise with food.....	2,710	1,176	1,110	922	1,301	1,388	1,417	1,670	1,858	1,938
Dry goods and other general merchandise.....	1,051	590	528	601	1,119	1,208	1,249	1,463	1,538	1,601
Variety.....	904	678	781	977	1,425	1,530	1,595	1,851	1,902	2,131
Other retail stores.....	4,454	1,957	2,825	3,859	7,516	8,040	8,735	10,482	11,590	12,307
Liquor.....	17	328	586	1,234	1,484	1,688	1,912	1,874	1,845	
All other.....	4,454	1,940	2,497	3,273	6,282	6,555	7,047	8,570	9,725	10,462
All retail stores, inventories, end of year.....	7,208	3,932	4,364	5,285	6,872	6,000	7,049	10,501	12,426	13,938

<sup>1</sup> Includes sales of certain milk dealers in the amount of \$130,000,000, not included in tables 1001, 1007, and 1009. Data for these concerns were received too late for inclusion in summary tables for 1929.

<sup>2</sup> Much of increase in sales of filling stations from 1929 to 1939 results from change in classification. Garages primarily selling gasoline and oil were classified separately as garages in 1929 Census of Retail Trade and included in filling station category in 1939 Census of Retail Trade.

Source: 1929 through 1939, Department of Commerce, Bureau of the Census; Census of Business, 1939, Vol. I, Retail Trade, Part 3. Other years, estimates by Department of Commerce, Office of Business Economics, based on trends shown by statistics available currently; published currently in Survey of Current Business.

No. 1001.—RETAIL TRADE—NUMBER OF STORES AND SALES, BY BUSINESS GROUPS AND KIND OF BUSINESS: 1929, 1935, AND 1939

KIND OF BUSINESS	NUMBER OF STORES			SALES (THOUSANDS OF DOLLARS)		
	1929	1935	1939	1929	1935	1939
<b>United States total<sup>1</sup></b>	<b>1,476,365</b>	<b>1,587,718</b>	<b>1,770,355</b>	<b>48,329,652</b>	<b>32,791,212</b>	<b>42,041,790</b>
<b>Food group</b>						
Grocery stores (without fresh meats)	481,891	532,010	560,549	10,837,421	8,362,425	10,164,967
Combination stores (groceries-meats)	191,876	188,738	200,303	3,449,129	2,202,607	2,225,435
Dairy products stores, milk dealers	115,549	106,233	187,034	3,903,662	4,149,813	5,496,318
Meat markets, fish markets	8,478	16,380	16,834	726,961	576,351	740,011
Candy, nut, confectionery stores	49,865	30,474	42,300	1,336,958	612,451	750,797
Fruit stores, vegetable markets	63,265	55,197	48,015	571,349	314,467	295,300
Other food stores	22,904	32,032	27,066	308,379	215,965	222,239
	29,954	33,356	38,337	540,783	290,771	434,867
<b>General stores (with food)</b>	<b>104,089</b>	<b>66,701</b>	<b>39,688</b>	<b>2,570,744</b>	<b>1,110,403</b>	<b>810,342</b>
<b>General merchandise group</b>						
Department stores <sup>2</sup>	54,636	44,651	50,267	6,444,101	4,619,751	5,665,007
Dry goods and general merchandise stores	4,221	4,201	4,074	4,350,098	3,311,070	3,974,998
Variety stores	38,305	28,709	29,247	1,189,856	827,862	713,208
	12,110	11,741	16,946	904,147	780,819	976,801
<b>Apparel group</b>						
Men's-boys' clothing, furnishings, hat stores	114,296	95,968	106,959	4,240,893	2,656,242	3,258,772
Family clothing stores	28,197	20,914	21,501	1,192,723	650,617	773,312
Women's ready-to-wear stores	10,551	7,881	10,063	552,353	358,849	429,454
Accessories, other apparel stores	18,253	21,975	25,820	1,087,601	704,902	1,009,494
Shoe stores (all kinds)	33,036	26,231	29,098	601,387	381,385	429,448
	24,259	18,967	20,487	806,829	511,399	617,064
<b>Furniture—household—radio group</b>						
Furniture stores	58,941	45,215	52,827	2,754,721	1,289,896	1,733,257
Other home furnishing stores	25,153	17,043	19,902	1,500,815	694,578	973,157
Household appliance, radio dealers	8,820	9,776	12,012	303,430	156,995	226,727
	24,068	18,396	20,013	941,476	438,323	533,373
<b>Automotive group<sup>1</sup></b>						
Motor-vehicle dealers (new)	69,379	50,459	60,132	7,043,386	4,236,586	5,548,687
Used-car dealers	42,204	30,294	33,009	6,266,580	3,725,438	4,810,245
Accessory, tire, battery dealers	3,097	4,751	6,980	140,932	122,204	183,700
Other automotive <sup>3</sup>	22,313	14,343	18,525	509,295	373,910	523,685
	1,765	1,071	1,018	36,579	15,034	20,967
<b>Filling stations</b>	<b>121,513</b>	<b>197,568</b>	<b>241,858</b>	<b>1,787,423</b>	<b>1,967,714</b>	<b>2,822,495</b>
<b>Lumber—building group</b>						
Lumber and building-materials dealers	52,814	36,553	39,667	2,621,064	1,105,296	1,761,205
Heating, plumbing, paint, electrical stores	26,377	21,149	25,067	1,981,284	806,805	1,478,459
	26,437	15,404	14,800	639,780	238,431	282,746
<b>Hardware group</b>						
Hardware stores	37,572	36,633	39,646	1,224,560	758,979	973,709
Farm implement—tractor—hardware dealers	25,330	20,996	29,147	706,053	407,217	629,276
	12,242	9,637	10,499	518,507	291,762	344,433
<b>Eating places</b>	<b>134,293</b>	<b>153,468</b>	<b>169,792</b>	<b>2,124,890</b>	<b>1,666,899</b>	<b>2,135,020</b>
<b>Drinking places</b>						
	98,005	135,594	-----	-----	723,961	1,385,032
<b>Drug stores</b>	<b>58,258</b>	<b>56,697</b>	<b>57,903</b>	<b>1,696,399</b>	<b>1,232,593</b>	<b>1,562,502</b>
<b>Liquor stores (packaged goods)</b>						
	12,105	19,136	-----	-----	328,307	586,351
<b>Other retail stores</b>						
Fuel, ice, fuel-oil dealers	173,618	139,135	172,375	4,841,982	2,618,820	3,496,437
Hay, grain, and feed stores	19,118	35,293	41,172	1,013,369	559,018	1,013,542
Farm and garden supply stores	21,394	11,132	16,772	900,742	346,667	623,977
Jewelry stores	5,740	9,176	4,915	128,422	252,471	155,312
Cigar stores, cigar stands	19,908	12,447	14,559	536,281	234,893	361,595
Florists	9,328	11,242	16,055	410,064	182,950	207,781
News dealers	10,285	7,071	7,407	176,201	98,718	148,741
Other retail stores	54,507	37,424	52,991	1,437,037	582,448	913,062
<b>Second-hand stores</b>	<b>15,065</b>	<b>22,550</b>	<b>23,962</b>	<b>148,068</b>	<b>113,340</b>	<b>188,007</b>

<sup>1</sup> Previously published totals for 1929 and 1935 revised to exclude data for service garages and other automotive service businesses whose receipts from service sales exceed their sales of merchandise. These are included in the Census of Service Establishments for 1939.

<sup>2</sup> Includes general merchandise mail-order houses.

<sup>3</sup> Bicycle shops, included in this classification for 1929, are included in "Other retail stores" for 1935 and 1939.

Source: Department of Commerce, Bureau of the Census; Census of Business, 1939, Vol. I, Retail Trade, Part 3.

## DISTRIBUTION AND SERVICES

No. 1002.—RETAIL TRADE—INDEXES OF DAILY AVERAGE SALES BY MONTHS:  
1945 TO 1948

[Adjusted for seasonal variation. 1935-39=100]

MONTH	ALL RETAIL STORES				DURABLE GOODS STORES <sup>1</sup>				NONDURABLE GOODS STORES <sup>1</sup>							
	1945		1946		1947		1948		1945		1946		1947		1948	
	1945	1946	1947	1948	1945	1946	1947	1948	1945	1946	1947	1948	1945	1946	1947	1948
January	187.4	230.8	283.5	324.7	115.8	171.1	282.2	357.4	210.8	250.2	283.9	314.1	199.6	263.0	320.7	374.0
February	188.7	237.7	289.6	324.6	115.8	175.3	297.7	357.6	212.4	258.0	286.9	313.9	193.5	241.4	292.7	330.7
March	193.5	241.4	292.7	330.7	119.2	185.0	300.8	376.0	217.7	259.8	290.0	316.0	183.7	246.9	298.6	337.9
April	189.0	251.9	300.2	329.5	115.5	203.2	307.7	386.5	205.6	261.2	295.7	322.0	192.9	252.9	303.6	337.1
May	192.9	252.9	303.6	337.1	120.6	215.6	312.7	376.9	216.5	265.0	300.7	324.1	199.6	263.1	304.0	336.9
June	192.9	252.9	303.6	337.1	123.8	232.0	313.6	389.5	224.3	273.2	300.9	319.7	196.4	278.5	302.9	338.0
July	199.6	263.1	304.0	336.9	119.5	250.8	313.1	405.0	221.4	287.1	300.6	316.1	198.0	271.7	304.3	337.0
August	196.4	278.5	302.9	338.0	127.0	261.0	340.5	396.6	221.2	279.7	310.3	322.0	201.8	275.4	318.6	338.0
September	198.0	271.7	304.3	337.0	135.8	265.7	347.7	385.7	231.7	278.6	309.1	322.5	216.1	281.9	322.8	334.2
October	201.8	275.4	318.6	338.0	145.7	268.7	349.7	382.5	239.1	286.2	314.0	318.4	217.3	286.8	328.8	343.2
November					147.6	286.6	361.2	391.7	240.0	286.8	318.2	327.4				

<sup>1</sup> Durable goods include building materials and hardware group, home furnishings group, automotive group, and jewelry stores; nondurable goods stores include all other kinds of business.

Source: Dept. of Commerce, Office of Business Economics; published currently in Survey of Current Business.

No. 1003.—RETAIL TRADE—NUMBER OF STORES AND SALES, BY SIZE OF STORE:  
1929, 1935, AND 1939

[Figures revised to exclude service garages classified in 1929 and 1935 as retail but included in Service Census in 1939. Size groups for 1935 exceed total by 987 stores and \$87,777,000 of sales, to avoid disclosures as explained in 1935 report (Retail Distribution: 1935, Vol. I, pp. 1-34)]

ANNUAL SALES GROUP AND YEAR	STORES		SALES	
	Number	Percent	Amount (\$1,000)	Percent
\$300,000 and over: 1929	15,029	1.0	12,323,766	25.5
1935	8,443	.5	6,879,155	20.9
1939	12,630	.7	9,855,031	23.4
\$100,000 to \$299,999: 1929	62,000	4.2	9,786,669	20.2
1935	37,196	2.4	5,828,224	17.7
1939	50,097	2.8	7,955,285	18.9
\$50,000 to \$99,999: 1929	127,148	8.6	8,631,707	17.9
1935	72,502	4.6	4,989,553	15.2
1939	93,318	5.3	6,394,703	15.2
\$30,000 to \$49,999: 1929	178,260	11.7	6,617,189	13.7
1935	119,705	7.5	4,581,413	14.0
1939	133,221	7.5	5,077,007	12.1
\$10,000 to \$29,999: 1929	468,885	31.8	8,349,491	17.3
1935	415,165	26.1	7,114,216	21.6
1939	522,117	29.5	8,938,632	21.3
Less than \$10,000: 1929	630,025	42.7	2,620,700	5.4
1935	935,634	58.9	3,486,428	10.6
1939	958,972	54.2	3,820,532	9.1

## No. 1004.—RETAIL TRADE—EMPLOYMENT BY SIZE OF STORE, BASED ON NUMBER EMPLOYED: 1939

NUMBER OF EMPLOYEES PER STORE	STORES		SALES		PROPRIETORS		EMPLOYEES	
	Number	Percent	Amount (\$1,000)	Percent	Number	Percent	Number	Percent
Total, all stores	1,770,355	100.0	42,041,790	100.0	1,613,673	100.0	4,600,217	100.0
100 or more	2,173	.1	4,631,063	11.0	198	-----	687,831	15.0
20 to 99	27,573	1.6	7,499,654	17.8	7,382	.4	975,384	21.2
10 to 19	50,732	2.9	5,428,733	12.9	23,986	1.5	607,871	14.5
8 or 9	28,446	1.6	1,995,740	4.8	15,559	1.0	238,421	5.2
6 or 7	60,762	3.4	3,243,946	7.7	40,101	2.5	388,008	8.4
4 or 5	121,914	6.9	4,447,498	10.6	88,304	5.5	532,703	11.6
3	122,357	6.9	3,109,777	7.5	96,683	6.0	363,617	7.9
2	201,941	11.4	3,670,135	8.7	172,531	10.7	398,696	8.7
No paid employees	401,164	22.6	4,103,592	9.8	383,075	23.7	347,686	7.5
	753,293	42.6	3,851,622	9.2	785,854	48.7	-----	-----

<sup>1</sup> Or fraction on monthly average basis.

Source of tables 1003 and 1004: Department of Commerce, Bureau of the Census; Census of Business, 1939, Vol. I, Retail Trade.

## No. 1005.—RETAIL TRADE—SUMMARY, BY BUSINESS GROUPS AND KIND OF BUSINESS: 1939

KIND OF BUSINESS	Number of stores	Sales (thousands of dollars)	Active proprietors of unincorporated businesses	Employees, full-time and part-time (average for year) <sup>1</sup>	Pay roll (thousands of dollars) <sup>1</sup>	Stocks on hand, end of year, at cost (thousands of dollars)
<b>United States total.....</b>	<b>1,770,355</b>	<b>42,041,790</b>	<b>1,613,673</b>	<b>4,600,217</b>	<b>4,529,499</b>	<b>5,116,583</b>
<b>Food group.....</b>						
Grocery stores (without fresh meats).....	560,549	10,164,967	516,976	798,462	760,762	589,938
Combination stores (groceries-meats).....	200,303	2,225,435	178,182	151,102	110,663	196,202
Dairy products stores.....	187,034	5,496,318	173,799	408,900	354,140	343,947
Milk dealers.....	7,382	142,728	4,111	20,314	17,892	3,237
Meat markets.....	9,452	507,283	9,207	81,586	140,078	4,859
Fish (sea food) markets.....	35,630	700,243	35,886	47,798	50,984	7,817
Candy, nut stores.....	6,730	50,554	6,968	5,280	4,246	490
Confectionery stores.....	4,625	40,200	3,087	6,775	5,040	1,191
Delicatessen stores.....	43,390	255,100	42,690	23,801	15,104	13,411
Fruit stores, vegetable markets.....	9,909	132,365	9,895	8,140	6,911	9,109
Bakeries, caterers.....	27,666	222,239	28,282	20,075	15,903	3,187
Bakeries, dealers.....	16,985	168,027	14,284	26,941	21,735	1,308
Egg and poultry dealers.....	6,532	63,350	6,545	4,906	3,514	670
Other food stores.....	4,911	71,125	4,040	12,784	14,462	4,420
<b>General stores (with food).....</b>	<b>39,688</b>	<b>810,342</b>	<b>83,646</b>	<b>60,701</b>	<b>47,376</b>	<b>174,130</b>
<b>General merchandise group.....</b>						
Department stores.....	50,267	5,665,007	35,362	867,007	803,485	922,178
Dry goods stores.....	4,074	3,974,998	560	560,052	611,706	561,493
General merchandise stores with food.....	15,628	229,286	14,748	26,597	22,730	77,192
General merchandise stores—other.....	2,737	112,108	2,448	10,828	9,409	25,767
Variety stores.....	10,882	371,814	8,714	51,764	37,836	118,072
<b>Apparel group.....</b>	<b>106,959</b>	<b>3,258,772</b>	<b>82,329</b>	<b>388,737</b>	<b>420,823</b>	<b>674,674</b>
Men's boys' furnishings stores.....	5,122	93,203	4,187	7,273	9,049	27,238
Men's boys' hat stores.....	802	15,598	465	1,580	1,819	2,606
Men's boys' clothing stores (and furnishings).....	15,577	604,511	13,104	57,730	80,382	194,671
Family clothing stores.....	10,053	429,454	8,317	50,334	58,478	106,860
Women's ready-to-wear stores.....	25,820	1,009,494	20,711	133,586	132,674	127,752
Furriers, fur shops.....	2,214	94,133	1,794	10,289	16,809	18,761
Millinery stores.....	10,799	118,586	7,472	23,559	18,888	5,023
Corset and lingerie shops.....	2,338	27,938	2,111	3,254	3,077	6,265
Hosiery shops.....	2,293	35,307	1,531	7,989	3,893	4,562
Other women's accessories stores.....	1,863	37,318	1,261	4,090	3,769	6,492
Infants' wear shops.....	625	13,436	554	1,341	1,275	3,223
Other apparel stores.....	3,292	36,448	3,204	5,186	4,372	8,145
Custom tailors.....	5,674	66,282	5,523	12,380	16,082	10,149
Men's shoe stores.....	2,472	78,770	650	5,694	7,462	16,427
Family shoe stores.....	15,280	384,156	10,417	40,711	42,831	113,247
Women's shoe stores.....	2,735	154,138	938	17,741	19,457	23,203
<b>Furniture—household—radio group.....</b>	<b>52,827</b>	<b>1,733,257</b>	<b>42,491</b>	<b>213,635</b>	<b>280,545</b>	<b>366,761</b>
Furniture stores.....	19,902	973,157	17,361	104,151	146,311	213,375
Floor coverings stores.....	1,986	58,618	1,826	6,083	9,311	15,148
Drapery, curtain, upholstery stores.....	930	15,843	859	1,906	2,054	3,702
China, glassware, metalware stores.....	778	21,821	582	2,915	3,655	6,755
Interior decorators.....	886	27,930	759	3,235	4,676	4,936
Antique shops.....	3,324	17,743	3,321	1,594	2,178	18,815
Other home-furnishings stores.....	4,108	84,772	3,733	19,459	21,335	19,290
Household appliance dealers.....	11,095	294,518	4,846	49,185	60,301	45,979
Radio and household-appliance stores.....	6,907	190,180	6,463	19,512	23,596	28,968
Radio stores.....	2,409	22,901	2,361	2,261	2,461	3,753
Radio and musical instrument stores.....	502	25,774	380	3,334	4,607	6,035
<b>Automotive group.....</b>	<b>60,132</b>	<b>5,548,687</b>	<b>51,238</b>	<b>389,298</b>	<b>507,947</b>	<b>554,960</b>
Motor-vehicle dealers (new and trade-in).....	31,511	4,292,716	27,318	287,270	378,615	403,998
Motor-vehicle and farm-implement dealers.....	1,170	88,607	1,239	6,038	7,259	13,449
Motor-vehicle dealers (retail and wholesale).....	928	428,022	512	22,794	34,714	31,649
Used-car dealers.....	6,980	193,790	6,808	12,981	14,177	25,985
Accessory, tire, battery dealers.....	18,525	523,655	14,424	57,601	70,023	75,611
Motorcycle dealers.....	513	8,619	504	895	1,023	2,032
Aircraft dealers.....	51	2,358	22	273	375	497
Motorboat, yacht dealers.....	454	9,990	411	846	1,119	1,739
<b>Filling stations.....</b>	<b>241,858</b>	<b>2,822,495</b>	<b>231,475</b>	<b>235,527</b>	<b>198,934</b>	<b>99,401</b>
<b>Lumber—building group.....</b>						
Lumber yards.....	39,667	1,761,205	26,135	169,799	220,628	389,053
Building-material dealers.....	20,621	1,196,817	10,615	109,624	143,269	295,714
Heating and plumbing equipment dealers.....	4,446	281,642	3,387	25,649	34,002	36,583
Paint, glass, wallpaper stores.....	4,202	102,404	3,644	14,932	18,924	15,470
Electrical supply stores.....	8,480	152,673	6,781	15,642	19,495	35,012
<b>Hardware group.....</b>						
Hardware stores.....	1,858	27,669	1,708	3,952	4,938	6,274
Farm implement—tractor—hardware dealers.....	39,646	973,709	39,620	82,497	91,532	317,063
Others.....	29,147	629,276	28,709	56,762	63,679	227,852

<sup>1</sup> Employees and pay roll include paid executives of corporations but not member and compensation of proprietors of unincorporated businesses.

## No. 1005.—RETAIL TRADE—SUMMARY, BY BUSINESS GROUPS AND KIND OF BUSINESS: 1939—Continued

KIND OF BUSINESS	Number of stores	Sales (thousands of dollars)	Active proprietors of unincorporated businesses	Employees, full-time and part-time (average for year) <sup>1</sup>	Pay roll (thousands of dollars) <sup>1</sup>	Stocks on hand, end of year, at cost (thousands of dollars)
<b>Eating places</b>	<b>169,792</b>	<b>2,135,020</b>	<b>170,002</b>	<b>594,648</b>	<b>405,896</b>	<b>34,900</b>
Restaurants, cafeterias, lunchrooms	99,068	1,764,854	101,276	529,528	364,451	29,406
Lunch counters and stands	62,673	332,295	61,364	58,728	37,532	4,487
Soft drink, juice, ice cream stands	8,051	37,871	7,362	6,392	3,913	947
<b>Drinking places</b>	<b>135,594</b>	<b>1,385,032</b>	<b>136,217</b>	<b>212,235</b>	<b>159,689</b>	<b>38,164</b>
Drinking places with meals	82,310	967,736	82,566	159,966	118,775	25,964
Drinking places—other	53,284	417,286	53,621	52,269	40,914	12,210
<b>Drug stores</b>	<b>57,903</b>	<b>1,562,502</b>	<b>49,673</b>	<b>189,403</b>	<b>172,733</b>	<b>304,883</b>
Drug stores with fountain	39,452	1,205,241	33,257	156,366	137,904	218,799
Drug stores—other	18,451	357,261	16,416	33,097	34,739	86,084
<b>Liquor stores (packaged goods)</b>	<b>19,136</b>	<b>586,351</b>	<b>13,670</b>	<b>25,676</b>	<b>30,782</b>	<b>66,203</b>
<b>Other retail stores</b>	<b>172,375</b>	<b>3,496,437</b>	<b>154,825</b>	<b>349,792</b>	<b>407,609</b>	<b>543,135</b>
Fuel and ice dealers	38,329	887,617	34,784	96,315	109,910	66,445
Fuel-oil retailers	2,843	126,925	2,126	9,169	13,873	5,089
Hay, grain, and feed stores (with groceries)	1,860	64,912	1,523	3,905	3,210	6,203
Hay, grain, and feed—farm implements	1,126	82,820	785	4,786	5,032	10,280
Hay, grain, and feed stores—other	13,786	476,245	11,645	26,660	25,707	42,394
Farm and garden supply stores	4,915	155,312	4,074	13,710	13,447	21,498
Jewelry stores	14,559	361,595	13,077	35,249	53,965	162,599
Book stores	2,845	73,842	2,156	12,434	13,932	16,152
Stationery stores	3,497	58,814	3,817	6,690	7,703	12,023
Cigar stores, cigar stands	18,504	207,781	16,748	14,425	14,085	18,456
Florists	16,055	148,741	16,074	23,128	22,641	9,493
Gift, novelty, souvenir shops	7,429	53,568	7,227	6,817	5,548	17,076
News dealers	7,407	72,427	6,038	11,671	6,335	3,894
Office, store appliance and equipment dealers	3,600	149,216	2,850	19,049	20,049	27,108
Office, store, school supply dealers	1,539	59,370	1,124	8,097	11,300	12,619
Opticians	5,995	60,567	5,412	7,655	11,919	6,770
Photographic supply—camera stores	1,112	32,343	982	3,277	4,086	9,412
Sporting goods stores	2,605	56,914	2,398	5,229	6,653	10,234
Bicycle shops	941	6,837	937	765	630	1,620
Luggage stores	759	19,345	606	1,942	2,601	6,080
Piano, musical instrument stores	2,930	65,127	2,534	8,282	11,040	16,237
Scientific, medical instrument and supply dealers	961	17,509	774	2,113	3,007	3,222
Other retail stores	18,778	259,610	17,339	28,024	31,927	54,321
<b>Second-hand stores</b>	<b>23,962</b>	<b>138,007</b>	<b>24,014</b>	<b>22,860</b>	<b>20,758</b>	<b>41,140</b>
Book stores	588	4,050	578	441	488	2,790
Clothing, shop stores	3,558	9,766	3,430	1,673	922	2,380
Furniture stores	7,375	31,463	7,882	4,016	3,061	6,461
Tires, accessories, parts	6,403	39,863	6,814	8,208	6,888	8,953
Pawn shops (sales)	1,373	22,808	1,252	2,998	4,357	12,904
Other second-hand stores	4,165	29,997	4,058	5,469	5,042	7,652

<sup>1</sup> Employees and pay roll include paid executives of corporations but not the number and compensation of proprietors of unincorporated businesses.

## No. 1006.—RETAIL CHAINS—SUMMARY: 1929, 1935, AND 1939

[All money figures in thousands of dollars]

ITEM	1929 <sup>1</sup>	1935 <sup>1</sup>	1939	ITEM	1935	1939
Number of chains	7,061	6,072	6,969	Number of employees...	1,171,671	1,339,496
Number of retail units (stores) <sup>2</sup>	159,638	139,773	132,763	Stores...	1,071,694	1,228,161
Number of warehouses	559	492	3,176	Central offices and warehouses...	99,977	111,335
Number of central offices	(4)	1,914	3,005	Salaries officers...	(4)	4,724
Sales through stores, all chains <sup>3</sup>	10,740,385	8,458,837	10,104,713	Other employees...	(4)	106,611
Billings (at wholesale) to own stores through warehouses	1,929,681	1,864,221	\$2,726,428	Pay roll...	1,211,066	1,439,117
Warehouse stocks, end of year, at cost	98,840	93,471	167,122	Stores...	1,023,125	1,215,540
				Central offices and warehouses...	187,941	223,577
				Salaried officers...	(4)	37,620
				Other employees...	(4)	185,948

<sup>1</sup> Figures for 1935 revised to exclude service garages; data to adjust 1929 figures not available.

<sup>2</sup> Represents, in addition to chain data shown in tables 1007 and 1008, data for multunit organizations with 4 or more retail units, such as public utility stores, State liquor stores, direct selling (house-to-house), and other lesser types.

<sup>3</sup> Not strictly comparable with previous years; a schedule form provided for reporting warehouse operations for 1939 resulted in the receipt of a greater number of separate reports.

<sup>4</sup> Data not available.

<sup>5</sup> Includes estimates for a small number of warehouses for which billings were not reported.

Source of tables 1005 and 1006: Department of Commerce, Bureau of the Census; Census of Business, 1939, Vol. I, Retail Trade, Part 3, for table 1005; Part I, for table 1006.

No. 1007.—RETAIL TRADE—NUMBER OF STORES AND SALES, BY TYPE OF OPERATION:  
1929, 1935, AND 1939

[Figures for 1929 and 1935 have been adjusted between types as grouped for 1939]

TYPE OF OPERATION	NUMBER OF STORES			SALES (THOUSANDS OF DOLLARS)		
	1929 <sup>1</sup>	1935 <sup>1</sup>	1939	1929 <sup>1</sup>	1935 <sup>1</sup>	1939
Total, all types.....	1,543,158	1,587,718	1,770,355	49,114,653	32,791,212	42,041,790
Independents.....	1,380,007	1,435,054	1,624,665	38,124,439	24,020,134	31,409,859
Chains.....	151,712	131,430	123,195	9,964,547	7,653,416	9,105,825
Utility-operated stores.....	4,053	3,936	4,836	163,371	123,242	151,539
Direct selling (house-to-house).....	1,661	6,349	5,199	93,961	125,316	153,397
Commissaries or company stores.....	1,347	1,888	2,007	115,583	113,126	148,248
Farmer and consumer cooperative stores.....	1,709	1,801	3,698	116,995	119,827	224,375
State liquor stores.....		2,080	2,618		163,381	249,430
Mail-order houses.....	271	378	434	515,237	420,027	537,413
Other types of operation.....	1,798	4,802	3,703	20,520	52,743	61,704

<sup>1</sup> Figures for 1935 revised to exclude data for service garages classified that year as Retail but included in Service Census for 1939. Data to adjust 1929 figures are not available.

Source: Department of Commerce, Bureau of the Census; Census of Business, 1939, Vol. I, Retail Trade.

No. 1008.—RETAIL TRADE—SUMMARY, BY TYPE OF OPERATION AND BY KIND OF BUSINESS: 1939

TYPE OF OPERATION AND KIND OF BUSINESS	Number of stores	Sales (thousands of dollars)	Percent of total sales	Active proprietors of unincorporated businesses	Employees, full-time and part-time (average for year) <sup>1</sup>	Total pay roll (thousands of dollars) <sup>1</sup>	Stocks on hand, end of year, at cost (thousands of dollars)
Total.....	1,770,355	42,041,790	100.0	1,613,673	4,600,217	4,529,499	5,116,533
Independents.....							
Single-store.....	1,624,665	31,409,859	74.7	1,602,937	3,322,447	3,259,854	4,048,753
Multunit.....	1,521,145	27,417,200	65.2	1,541,060	2,839,921	2,727,862	3,511,964
Market and roadside stands.....	77,846	3,752,609	8.0	37,544	457,560	510,852	523,877
Leased departments—Independent.....	18,014	103,162	.3	17,281	10,656	7,675	1,798
Chains.....							
Local chains.....	28,455	9,105,825	21.7	3,102	1,118,374	1,090,106	876,948
Sectional or national chains.....	82,040	6,771,009	16.1	2,081	192,943	207,430	143,462
Manufacturer-controlled chains.....	10,123	583,062	1.4	36	830,320	767,908	652,734
Leased-department chains.....	5,568	170,368	.4	146	70,414	91,781	65,823
Other types.....							
Utility-operated stores.....	22,495	1,526,106	3.6	7,634	159,396	179,539	190,882
Direct selling (house-to-house).....	4,836	151,539	.4	138	25,928	31,281	24,250
Commissaries or company stores.....	5,199	153,371	.4	3,492	40,883	42,982	7,803
Farmer and consumer cooperative stores.....	2,007	148,242	.3	231	11,980	13,183	16,868
State liquor stores.....	3,698	224,375	.5		16,801	17,546	20,621
Mail-order houses.....	2,618	249,430	.6		7,960	10,707	18,254
Other types of operation.....	434	537,413	1.3	257	50,955	58,487	100,035
Grocery stores (without fresh meats).....	3,703	61,704	.1	3,516	4,829	5,353	3,051
Combination stores (groceries-meats).....							
Independents.....	200,303	2,225,435	100.0	178,182	131,102	110,663	196,202
Chains.....	179,335	1,491,473	67.0	177,582	69,402	49,191	148,916
Direct selling (house-to-house).....	20,093	720,427	32.4	129	59,802	59,886	40,062
Commissaries or company stores.....	263	3,456	.2	228	793	750	255
Other types.....	307	4,597	.2	129	346	322	403
Dairy products, milk dealers.....	305	5,482	.2	114	669	514	566
Candy, nut, confectionery stores.....							
Independents.....	187,034	5,496,318	100.0	173,799	408,900	354,140	343,947
Chains.....	166,276	3,366,153	61.3	173,302	238,454	188,977	246,726
Commissaries or company stores.....	20,257	2,112,092	38.4	839	168,826	163,669	95,695
Other types.....	166	6,587	.1	27	472	516	633
233	11,516	.2	131	1,148	978	893	
Furniture, home furnishings, and fixtures.....							
Independents.....	16,834	740,011	100.0	13,818	101,900	157,970	8,096
Chains.....	13,603	418,408	50.5	13,199	59,344	80,877	5,674
Other types.....	3,076	306,028	41.4	78	40,406	73,646	2,266
215	15,575	2.1	41	2,150	3,447	156	
Automobiles, parts, and accessories.....							
Independents.....	48,015	295,300	100.0	45,777	30,576	20,144	14,602
Chains.....	45,579	242,183	82.0	45,533	19,052	12,058	13,562
Other types.....	2,223	51,043	17.3	66	10,383	7,883	941
213	2,074	.7	178	241	203	99	

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.

## No. 1008.—RETAIL TRADE—SUMMARY, BY TYPE OF OPERATION AND BY KIND OF BUSINESS: 1939—Continued

TYPE OF OPERATION AND KIND OF BUSINESS	Number of stores	Sales (thousands of dollars)	Percent of total sales	Active proprietors of unincorporated businesses	Employees, full-time and part-time (average for year) <sup>1</sup>	Total pay roll (thousands of dollars) <sup>1</sup>	Stocks on hand, end of year, at cost (thousands of dollars)
<b>Department stores</b>	4,074	3,974,998	100.0	560	566,052	611,706	561,493
Independents	1,371	2,312,279	58.2	535	371,903	423,654	317,610
Chains	2,672	1,194,517	30.0	25	150,064	137,626	153,840
Mail-order houses	24	404,289	11.7	43	635	49,876	89,519
Other types	7	3,913	.1	450		550	524
<b>Variety stores</b>	16,946	976,801	100.0	9,892	211,766	121,804	139,654
Independents	10,555	128,909	13.2	9,755	22,283	11,014	36,257
Chains	6,372	847,686	86.8	121	189,469	110,778	103,377
Other types	19	206	(*)	16	14	12	20
<b>Men's-boys' clothing, furnishings, hat stores</b>	21,501	773,312	100.0	17,846	66,583	91,250	224,535
Independents	19,621	598,737	77.4	17,726	52,080	70,182	194,072
Chains	1,816	171,579	22.2	68	14,208	20,749	30,105
Other types	64	2,996	.4	52	205	319	358
<b>Family clothing stores</b>	10,053	429,454	100.0	8,317	56,334	58,478	106,800
Independents	8,935	352,639	82.1	8,235	44,543	46,419	94,446
Chains	1,082	76,283	17.8	50	11,732	12,000	12,252
Other types	36	532	.1	32	59	59	102
<b>Women's ready-to-wear stores</b>	25,820	1,009,494	100.0	20,711	133,586	132,674	127,752
Independents	22,424	694,119	68.8	20,448	93,253	94,631	101,125
Chains	2,880	263,102	26.1	130	33,809	31,987	21,520
Leased departments	386	31,705	3.1	100	3,913	3,303	2,523
Other types	130	20,508	2.0	33	2,551	2,453	2,584
<b>Shoe stores (all kinds)</b>	20,487	617,064	100.0	12,005	64,146	69,750	152,967
Independents	13,215	253,822	41.2	11,581	24,509	27,870	88,077
Chains	5,721	306,816	49.7	109	33,466	35,146	54,730
Leased departments	1,522	52,549	8.5	294	6,004	6,388	9,850
Other types	29	3,877	.6	21	167	346	310
<b>Furniture stores</b>	19,902	973,157	100.0	17,361	104,151	146,311	213,375
Independents	19,091	829,830	85.3	17,295	88,445	122,900	190,569
Chains	784	141,864	14.6	44	15,474	23,106	22,628
Other types	27	1,463	.1	22	232	305	188
<b>Household appliance dealers</b>	11,095	294,518	100.0	4,846	49,185	60,301	45,979
Independents	5,007	92,436	31.4	4,713	11,304	12,580	14,072
Chains	1,214	53,973	18.3	12	12,242	17,280	8,866
Leased departments	282	5,147	1.7	32	730	886	647
Utility-operated stores	4,449	138,635	47.1	9	23,047	28,473	22,134
Direct selling (house-to-house)	162	4,028	1.4	77	920	1,033	211
Other types	11	299	.1	3	42	40	50
<b>Radio—household appliance dealers</b>	6,907	190,180	100.0	6,463	19,512	23,596	28,968
Independents	6,529	160,020	84.1	6,370	16,655	18,901	25,069
Chains	169	19,392	10.2	10	1,407	2,343	2,182
Leased departments	49	1,514	.8	41	158	155	295
Utility-operated stores	123	7,436	3.9	8	1,162	1,900	1,147
Direct selling (house-to-house)	29	322	.2	34	42	39	72
Other types	8	1,436	.8	88	138	203	
<b>Radio stores—other</b>	2,911	48,675	100.0	2,741	5,595	7,128	9,793
Independents	2,831	39,122	80.4	2,731	4,406	5,334	7,508
Chains	70	9,292	18.1	5	1,159	1,763	2,191
Other types	10	261	.5	5	30	31	34
<b>Motor-vehicle dealers (new)</b>	33,609	4,810,245	100.0	29,069	316,702	420,588	449,096
Independents	33,272	4,679,450	97.3	29,009	308,355	406,706	438,933
Chains	327	129,789	2.7	59	8,260	13,781	10,062
Other types	10	1,006	(*)	1	78	101	101
<b>Accessory, tire, battery dealers</b>	18,525	523,685	100.0	14,424	57,601	70,665	75,611
Independents	14,500	287,619	54.9	14,370	32,867	37,881	47,801
Chains	4,017	235,961	45.1	51	24,706	32,751	27,687
Other types	8	205	(*)	3	28	33	33
<b>Filling stations</b>	241,858	2,822,495	100.0	231,475	235,527	198,934	99,401
Independents	230,460	2,495,741	88.4	231,127	199,562	156,825	87,616
Chains	10,291	288,370	10.2	305	32,671	38,518	8,966
Cooperatives	1,017	35,304	1.3	-----	3,030	3,331	2,677
Other types	90	3,080	.1	43	264	260	142

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.

<sup>2</sup> Less than one-tenth of 1 percent.

## No. 1008.—RETAIL TRADE—SUMMARY, BY TYPE OF OPERATION AND BY KIND OF BUSINESS: 1939—Continued

TYPE OF OPERATION AND KIND OF BUSINESS	Number of stores	Sales (thousands of dollars)	Percent of total sales	Active proprietors of unincorporated businesses	Employees, full-time and part-time (average for year) <sup>1</sup>	Total pay roll (thousands of dollars) <sup>1</sup>	Stocks on hand, end of year, at cost (thousands of dollars)
Lumber, building-materials dealers	25,067	1,478,459	100.0	14,002	135,273	177,271	332,297
Independents	19,181	1,177,407	79.6	13,888	108,447	145,038	246,613
Chains	5,781	295,582	20.0	95	26,416	31,820	84,420
Other types	105	5,470	.4	19	410	413	1,264
Paint, glass, wallpaper stores	8,480	152,673	100.0	6,781	15,642	19,495	35,012
Independents	7,427	111,269	72.9	7,734	11,368	13,055	27,105
Chains	1,039	40,586	26.6	36	4,059	5,631	7,784
Other types	14	818	.5	11	215	209	63
Hardware stores	29,147	629,276	100.0	28,709	56,762	63,679	227,852
Independents	28,641	600,921	95.5	28,642	53,814	60,057	220,178
Chains	444	25,413	4.0	39	2,747	3,307	6,989
Other types	62	2,942	.5	28	201	245	885
Restaurants, other eating places	169,792	2,135,401	100.0	170,002	594,648	405,896	34,900
Independents	164,401	1,830,039	85.7	169,669	503,235	332,952	31,903
Chains	5,087	297,440	13.9	219	89,104	71,285	2,826
Other types	304	7,541	.4	114	2,249	1,659	171
Drug stores with fountain	39,452	1,205,241	100.0	33,257	156,366	137,994	218,799
Independents	36,101	877,695	72.8	33,183	110,977	98,539	182,432
Chains	3,240	326,549	27.1	71	45,262	44,332	36,222
Other types	21	997	.1	3	127	123	145
Drug stores, other	18,451	357,261	100.0	16,416	33,027	34,739	86,084
Independents	17,532	282,825	79.2	16,382	27,397	27,629	77,347
Chains	885	73,713	20.8	46	5,580	7,025	8,076
Other types	34	723	.2	18	60	85	61
Liquor stores (packaged goods)	19,136	586,351	100.0	13,670	25,676	30,782	66,203
Independents	16,889	316,899	54.1	13,616	16,291	18,450	45,301
Chains	621	10,875	3.4	52	1,408	1,613	2,045
State liquor stores	2,018	249,430	42.5	-----	7,960	10,707	18,254
Other types	8	147	(2)	2	17	12	3
Fuel, ice, fuel-oil dealers	41,172	1,013,542	100.0	37,210	105,484	123,783	71,534
Independents	39,763	857,333	84.6	36,990	90,747	103,612	60,130
Chains	1,134	152,681	15.1	26	14,225	19,651	11,036
Other types	275	8,528	.3	194	512	520	368
Hay, grain and feed stores	16,772	623,977	100.0	13,953	35,351	33,949	58,877
Independents	14,370	445,538	71.5	13,895	25,272	23,429	42,386
Chains	1,233	74,442	11.9	44	4,808	5,280	7,337
Cooperatives	1,144	103,720	16.6	-----	5,250	5,226	9,132
Other types	16	268	(2)	14	12	5	22
Farm and garden supply stores	4,915	155,312	100.0	4,074	13,710	13,447	21,498
Independents	4,384	106,076	68.7	4,014	8,090	8,836	14,894
Chains	121	12,535	8.1	6	894	1,118	1,154
Cooperatives	331	25,583	16.5	-----	1,768	1,694	2,439
Mail-order	36	8,251	5.3	18	1,171	1,280	2,069
Other types	43	2,267	1.4	36	1,186	519	432
Jewelry stores	14,559	361,595	100.0	13,077	35,249	53,965	162,599
Independents	13,933	321,746	89.0	13,025	30,976	47,247	154,650
Chains	540	38,014	10.5	30	4,096	6,480	7,573
Other types	26	1,835	.5	22	178	238	376
Cigar stores, cigar stands	18,504	207,781	100.0	16,748	14,425	14,085	18,456
Independents	16,886	150,060	72.2	16,675	9,023	8,261	13,752
Chains	1,533	56,300	27.1	29	4,627	5,661	4,622
Other types	85	1,421	.7	44	176	163	82
Florists	16,055	148,741	100.0	16,074	23,128	22,641	9,493
Independents	15,933	144,109	96.9	16,049	22,454	21,770	9,320
Chains	102	4,558	3.1	6	663	859	172
Other types	20	74	(2)	19	11	6	1
New dealers	7,407	72,427	100.0	6,038	11,671	6,335	3,894
Independents	6,051	52,501	72.5	6,017	7,844	3,385	3,321
Chains	1,342	19,768	27.3	8	3,791	2,935	573
Other types	14	100	.2	13	30	15	-----
All other kinds of business	455,572	6,712,992	100.0	436,876	784,577	735,336	970,814

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.<sup>2</sup> Less than one-tenth of 1 percent.

Source: Department of Commerce, Bureau of the Census; Census of Business, 1939, Vol. I, Retail Trade.

## DISTRIBUTION AND SERVICES

## No. 1009.—RETAIL TRADE—SUMMARY, BY STATES: 1929, 1935, AND 1939

[Data for 1929 and 1935 revised to exclude service garages and other automotive service businesses whose receipts from service sales exceeded their sales of merchandise. These are included in the Census of Service Establishments for 1939.]

DIVISION AND STATE	NUMBER OF STORES			SALES (THOUSANDS OF DOLLARS)			ACTIVE PROPRIETORS OF UNINCORPORATED BUSINESSES		
	1929	1935	1939	1929	1935	1939	1929	1935	1939
	1,476,365	1,557,718	1,770,355	48,329,652	32,791,212	42,041,790	1,434,704	1,440,108	1,613,673
U. S.	104,618	109,382	121,888	3,732,087	2,687,620	3,318,214	94,441	90,967	101,716
N. E.	10,453	119,36	13,455	300,010	226,911	281,356	9,700	10,531	11,821
Maine	6,181	6,797	7,435	180,248	149,654	188,100	5,935	6,110	6,600
N. H.	4,831	4,626	5,423	148,281	96,724	123,369	4,912	4,210	4,942
Vt.	52,661	53,606	59,217	2,031,839	1,446,212	1,737,680	46,705	43,404	47,538
Mass.	9,155	8,791	10,485	313,978	217,728	275,447	8,339	7,369	9,100
R. I.	21,337	23,626	25,873	757,731	550,391	717,262	18,850	19,343	21,716
Conn.	372,026	389,405	412,819	12,527,976	8,374,439	10,291,937	350,414	344,390	376,068
M. A.	183,615	198,608	209,425	6,968,031	4,704,233	5,578,159	169,129	175,421	191,259
N. Y.	57,780	65,688	68,851	81,251,257	1,206,980	1,580,401	53,595	56,561	59,277
Pa.	130,631	125,109	134,643	3,747,788	2,463,216	3,133,377	127,690	112,408	125,532
E. N. C.	304,986	326,862	364,508	11,113,186	7,103,071	9,251,114	290,328	295,769	332,029
Ohio	80,155	89,303	93,041	2,829,354	1,940,031	2,441,293	74,786	79,193	82,712
Ind.	39,402	40,318	47,317	1,200,458	771,377	1,006,383	38,463	37,620	44,003
Ill.	93,432	95,033	109,132	3,058,560	2,152,432	2,857,646	89,019	85,694	100,099
Mich.	53,952	59,820	67,414	2,202,405	1,377,122	2,708,709	51,148	54,229	61,129
Wis.	38,045	42,388	47,004	1,222,409	862,109	1,064,994	36,912	38,033	44,086
W. N. C.	161,393	182,051	197,909	5,178,845	3,471,806	4,138,883	162,404	171,236	185,927
Minn.	29,206	35,481	40,448	1,036,012	808,857	1,017,195	29,091	33,113	38,932
Iowa	30,933	36,768	39,024	956,008	640,621	822,905	31,395	35,617	37,111
Mo.	44,586	48,581	53,196	1,422,449	935,027	1,102,503	44,080	45,059	49,328
N. Dak.	7,611	8,464	8,549	230,602	147,327	156,137	7,482	7,833	7,818
S. Dak.	8,330	9,014	9,817	249,935	144,333	169,396	8,419	8,302	8,954
Nebr.	16,682	17,990	19,330	553,611	354,520	397,196	17,351	16,774	18,004
Kans.	24,045	25,753	27,645	730,228	441,121	473,551	24,580	24,558	25,780
S. A.	162,295	176,036	199,371	4,138,337	3,267,937	4,368,947	159,100	157,391	174,561
Del.	3,527	4,257	4,544	101,861	76,019	110,052	3,240	3,828	4,001
Md.	20,371	22,515	25,566	61,967	457,305	619,273	19,356	20,657	23,774
D. C.	5,815	6,341	6,893	332,393	329,034	402,768	5,027	4,667	5,498
Va.	25,036	25,860	29,610	591,763	466,768	628,172	24,854	22,944	25,389
W. Va.	16,501	18,285	18,928	441,072	329,383	403,089	16,476	16,225	16,202
N. C.	27,660	28,654	33,826	642,550	460,083	633,240	28,780	26,442	29,890
S. C.	14,452	16,196	18,520	296,674	246,214	332,224	14,072	14,142	15,759
Ga.	27,640	30,355	32,870	627,171	481,197	624,765	27,821	27,614	28,797
Fla.	21,293	23,573	28,614	493,886	421,934	614,464	19,474	20,872	25,251
E. S. C.	85,315	90,688	101,065	2,137,499	1,371,619	1,845,037	89,610	86,069	93,025
Ky.	25,927	28,139	30,919	577,029	382,761	520,135	27,131	26,954	28,970
Tenn.	22,368	26,470	28,198	632,612	477,720	606,489	24,057	25,017	25,980
Ala.	20,456	21,351	23,916	518,972	334,223	435,973	20,845	19,870	21,715
Miss.	16,564	14,728	18,032	407,986	176,915	282,440	17,577	14,228	16,300
W. S. C.	128,542	132,615	159,768	3,654,572	2,284,559	3,101,358	132,446	126,539	148,785
Ark.	17,167	17,653	20,328	406,206	238,809	298,301	18,510	17,478	19,071
La.	22,559	22,615	25,469	469,755	341,911	486,250	23,081	20,797	22,845
Oklahoma	25,984	24,734	28,722	781,121	430,084	513,091	26,220	23,887	27,221
Tex.	62,832	67,613	85,249	1,997,490	1,273,755	1,803,716	64,635	64,427	79,648
Mt.	42,022	46,599	57,459	1,515,313	1,082,660	1,427,541	40,695	42,198	53,112
Mont.	6,521	7,490	8,481	238,293	185,556	222,008	6,220	6,628	7,867
Idaho	4,624	5,553	6,804	165,352	137,855	175,873	4,425	4,999	6,223
Wyo.	2,837	3,323	4,113	101,457	81,439	100,233	2,786	3,051	3,803
Colo.	13,139	13,504	16,785	457,413	298,156	409,103	12,393	12,387	15,770
N. Mex.	3,941	4,610	6,617	116,833	87,691	125,765	4,031	4,306	6,139
Ariz.	4,766	4,939	6,242	193,818	118,874	162,003	4,852	4,600	5,726
Utah	4,964	5,565	6,872	193,286	130,050	170,728	4,697	4,710	5,520
Nev.	1,230	1,615	2,045	48,861	43,039	61,828	1,201	1,427	2,004
Pac.	115,168	134,080	155,568	4,331,897	3,147,501	4,298,759	115,266	125,549	148,450
Wash.	20,836	23,887	27,891	521,186	668,790	19,808	22,046	24,798	
Oreg.	13,544	14,523	16,458	443,303	329,636	442,180	13,785	13,580	15,757
Calif.	80,788	95,670	112,428	3,142,643	2,296,079	3,187,809	81,673	89,923	107,895

## No. 1009.—RETAIL TRADE—SUMMARY, BY STATES: 1929, 1935, AND 1939—Continued

DIVISION AND STATE	EMPLOYEES, FULL-TIME AND PART-TIME (AVERAGE FOR YEAR) <sup>1</sup>			TOTAL PAY ROLL (THOUSANDS OF DOLLARS) <sup>1</sup>			STOCKS ON HAND, END OF YEAR, AT COST (THOUSANDS OF DOLLARS)		
	1929	1935	1939	1929	1935	1939	1929	1935	1939
U. S.	4,286,516	3,898,258	4,600,217	5,044,128	3,568,167	4,529,499	7,199,656	4,271,280	5,116,533
N. E.	353,152	324,883	362,123	411,822	317,000	377,957	506,262	306,496	361,784
Maine	25,536	23,995	28,113	26,895	21,889	26,079	51,878	32,383	37,814
N. H.	15,697	15,868	18,149	16,215	14,624	17,322	27,306	18,388	21,408
Vt.	11,229	9,739	12,010	12,210	8,483	10,707	26,225	15,488	17,887
Mass.	202,958	183,419	203,312	236,296	179,259	212,966	256,367	149,037	176,600
R. I.	31,228	28,522	30,301	35,203	27,335	30,978	40,459	24,947	29,209
Conn.	66,504	63,340	70,248	85,003	66,010	79,905	104,027	65,343	78,866
M. A.	1,063,140	969,724	1,068,613	1,362,975	976,484	1,170,430	1,886,856	1,085,256	1,245,297
N. Y.	862,797	521,430	567,150	773,333	562,113	660,093	1,031,968	609,118	679,708
N. J.	141,980	134,786	153,073	187,036	138,575	171,619	245,087	135,688	166,727
Pa.	358,363	313,508	347,790	402,007	275,796	338,718	609,853	340,450	398,864
E. N. C.	990,429	861,846	1,031,047	1,217,620	790,551	1,028,315	1,514,132	852,202	1,046,193
Ohio	260,793	239,145	270,425	310,955	217,016	271,073	382,612	210,104	252,393
Ind.	115,269	96,473	123,192	122,122	80,388	110,895	172,275	100,093	129,048
Ill.	331,078	268,888	332,003	428,553	250,578	339,072	501,678	272,381	337,808
Mich.	180,121	161,314	198,018	237,340	150,637	204,026	275,496	157,605	197,524
Wis.	103,168	96,026	107,409	118,650	82,932	103,249	182,071	112,079	129,330
W. N. C.	456,292	405,823	459,926	482,899	384,037	401,238	556,798	513,505	584,556
Minn.	90,918	90,967	106,282	101,246	81,798	104,204	165,169	111,318	135,986
Iowa	83,128	71,802	87,684	83,502	54,768	72,514	158,330	92,696	112,603
Mo.	136,641	122,579	132,583	148,283	102,261	119,237	222,154	131,163	142,484
N. Dak.	16,333	13,776	15,227	17,487	11,905	12,960	44,870	25,275	27,234
S. Dak.	19,731	15,262	17,307	19,822	11,827	13,582	47,637	27,144	28,773
Nebr.	46,579	40,135	44,353	48,188	32,518	36,221	99,284	59,042	64,464
Kans.	63,062	51,312	56,490	64,371	38,960	42,510	119,364	66,887	72,922
S. A.	399,711	417,269	519,636	407,206	388,898	447,647	626,201	418,363	512,538
Del.	8,947	8,942	10,972	9,551	8,226	11,168	14,362	9,708	12,193
Md.	58,616	58,612	70,750	62,764	50,840	66,079	77,961	52,101	61,590
D. C.	33,806	41,675	48,072	43,306	42,473	56,007	37,463	29,009	35,511
Va.	58,513	57,104	74,864	59,659	47,776	63,887	104,492	68,187	82,708
W. Va.	36,087	36,776	42,318	40,968	31,142	38,263	72,018	44,612	51,252
N. C.	50,317	50,328	70,404	56,123	43,602	60,082	104,862	66,417	79,483
S. C.	29,450	32,059	41,119	25,316	22,229	29,093	38,583	27,050	32,330
Ga.	65,001	65,782	78,947	58,792	46,195	58,874	95,614	65,598	80,723
Fla.	49,974	56,391	73,190	50,727	45,415	64,244	80,846	55,651	76,748
E. S. C.	194,708	172,429	211,275	187,323	127,388	162,575	337,197	196,082	241,307
Ky.	52,341	47,293	55,062	51,067	36,101	46,090	97,608	58,087	71,413
Tenn.	61,140	60,310	71,869	59,144	45,948	58,924	97,450	63,061	75,761
Ala.	48,730	41,818	51,830	46,791	29,896	37,826	82,169	46,452	55,987
Miss.	32,497	23,008	32,514	29,721	15,443	22,735	59,970	28,482	38,146
W. S. C.	324,486	285,952	366,048	336,029	220,358	293,418	593,586	332,829	413,528
Ark.	33,482	27,590	32,581	31,986	19,135	23,775	71,528	39,544	45,828
La.	49,207	49,608	63,638	47,698	36,369	49,000	71,810	47,224	56,775
Okla.	65,944	52,709	59,988	71,931	40,440	48,953	127,427	65,427	75,801
Tex.	175,853	156,045	209,841	184,414	124,414	171,680	322,821	180,024	235,126
Mt.	127,736	112,436	145,340	150,639	106,896	145,205	245,900	152,158	188,110
Mont.	17,822	17,278	19,963	22,493	18,287	21,505	44,684	28,970	32,061
Idaho.	12,638	12,828	16,549	14,880	12,445	16,189	28,303	19,316	23,970
Wyo.	7,394	7,213	8,938	9,420	7,305	9,346	17,777	12,311	14,826
Colo.	43,860	35,370	45,083	49,100	20,409	43,503	73,013	40,212	53,065
N. Mex.	9,413	9,211	12,846	9,935	8,121	11,598	20,047	14,534	18,577
Ariz.	15,490	12,825	10,577	18,938	12,202	17,119	26,544	15,355	19,501
Utah.	18,237	15,662	19,562	20,958	14,317	18,743	27,323	15,938	18,711
Nev.	3,382	4,149	5,822	4,897	4,810	7,204	8,209	5,513	7,339
Pac.	376,862	347,896	436,199	487,615	356,555	502,714	632,724	414,399	523,270
Wash.	65,758	56,277	66,852	80,639	55,327	75,405	100,364	70,035	81,527
Oreg.	39,017	34,241	41,720	46,167	33,000	44,154	71,088	46,517	57,979
Calif.	272,087	257,278	327,027	360,809	268,228	383,155	452,272	267,847	383,765

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.

## DISTRIBUTION AND SERVICES

No. 1010.—RETAIL SALES OF CHAIN STORES AND MAIL-ORDER HOUSES, BY KINDS OF BUSINESS: 1933 TO 1948

[Millions of dollars]

KIND OF BUSINESS	1933	1935	1939	1941	1944	1945	1946	1947	1948 <sup>1</sup>
Total sales.....	6,618	8,040	9,570	12,434	15,523	16,352	21,158	25,334	27,922
Durable goods stores.....	530	825	1,049	1,429	1,304	1,478	2,246	2,819	3,143
Automotive group.....	191	355	372	488	343	380	665	738	839
Motor-vehicle dealers.....	115	168	136	185	50	56	142	241	313
Parts and accessories.....	76	187	236	303	293	324	523	407	526
Building materials and hardware group.....	182	289	400	564	597	679	870	1,195	1,379
Building materials.....	162	250	350	491	527	602	760	1,057	1,220
Farm implements.....	2	15	25	35	27	29	40	59	78
Hardware.....	18	18	25	38	43	48	70	79	81
Home furnishings group.....	146	162	239	312	248	293	553	732	783
Furniture and house furnishings.....	86	97	151	176	165	183	276	326	333
Household appliances and radios.....	60	65	88	136	83	110	277	400	450
Jewelry.....	11	22	38	65	115	126	158	154	142
Nondurable goods stores.....	6,088	7,212	8,521	11,005	14,219	14,874	18,912	22,515	24,770
Apparel group <sup>2</sup> .....	589	758	991	1,309	2,050	2,213	2,593	2,750	2,960
Men's clothing and furnishings.....	112	141	173	242	304	324	437	491	483
Women's apparel and accessories.....	215	260	394	531	1,058	1,142	1,233	1,270	1,448
Shoes.....	221	279	345	430	517	565	705	766	790
Drug stores.....	207	317	400	479	681	704	830	834	840
Eating and drinking places.....	182	248	304	361	509	531	596	618	632
Food group.....	2,504	2,916	3,340	4,352	5,594	5,714	7,424	9,677	10,805
Grocery and combination.....	2,209	2,466	2,833	3,745	4,710	4,769	6,291	8,436	9,511
Other food.....	385	450	507	607	884	945	1,133	1,241	1,204
Filling stations.....	544	428	288	306	188	217	294	373	452
General merchandise group <sup>2</sup> .....	1,580	2,124	2,693	3,532	4,235	4,436	5,881	6,793	7,515
Department, dry goods, and general merchandise <sup>3</sup> .....	751	990	1,330	1,836	2,215	2,376	3,240	3,841	4,300
Mail-order <sup>3</sup> .....	220	386	464	617	601	598	941	1,145	1,208
Variety.....	618	709	848	1,016	1,317	1,367	1,507	1,769	1,704
Other retail stores.....	323	426	505	666	962	1,050	1,294	1,461	1,586

<sup>1</sup> Preliminary.<sup>2</sup> Apparel group totals for all years and general merchandise group totals for 1935-48 include other related business not separately shown.<sup>3</sup> Catalog business only is shown as mail-order sales; sales of retail stores owned by mail-order companies are included with department, dry goods, and general merchandise stores.

Source: Department of Commerce, 1933, 1935, and 1939, Bureau of the Census; Census of Business, 1939, Vol. I, Retail Trade, Part 1. Other years, estimates by Office of Business Economics; based on trends shown by currently reported data of chain organizations. Current data published in Survey of Current Business.

No. 1011.—RETAIL SALES OF CHAIN STORES AND MAIL-ORDER HOUSES—INDEXES OF DAILY AVERAGE SALES ADJUSTED FOR SEASONAL VARIATION: 1945 TO 1948

[1935-39=100]

MONTH	TOTAL CHAIN STORE AND MAIL ORDER				GROCERY AND COMBINATION STORES		DRUG STORES		APPAREL STORES		GENERAL MERCHANDISE STORES AND MAIL ORDER	
	1945	1946	1947	1948 <sup>1</sup>	1947	1948 <sup>1</sup>	1947	1948 <sup>1</sup>	1947	1948 <sup>1</sup>	1947	1948 <sup>1</sup>
January.....	177.2	213.6	256.1	294.9	292.9	350.1	230.6	228.0	200.6	287.2	247.8	284.2
February.....	176.1	218.3	264.7	296.8	306.8	353.7	236.0	234.5	201.6	208.7	252.1	284.2
March.....	181.9	224.1	271.0	303.0	311.3	359.8	231.9	231.6	287.4	311.0	260.7	292.6
April.....	168.5	224.4	276.7	312.4	320.1	363.3	229.1	225.3	292.4	316.6	268.4	311.2
May.....	172.3	225.0	278.6	311.2	316.1	371.0	230.2	227.7	308.0	319.4	269.9	295.4
June.....	174.9	226.4	280.4	313.0	316.7	357.4	223.9	228.1	305.0	321.5	272.7	311.3
July.....	183.0	235.1	282.1	314.8	320.5	360.9	222.9	225.9	306.5	322.8	275.4	314.0
August.....	178.2	256.1	282.2	317.3	322.4	364.5	220.0	232.2	300.6	325.8	273.8	320.6
September.....	177.8	248.2	292.5	316.6	326.0	359.6	229.7	231.8	326.1	344.4	287.1	315.0
October.....	190.0	241.1	289.3	312.2	339.5	365.4	227.2	223.3	300.8	345.3	276.5	300.4
November.....	198.7	252.8	298.4	307.6	338.1	360.4	226.0	225.0	323.3	330.3	294.1	303.0
December.....	199.1	262.7	302.2	318.8	337.5	359.6	228.7	227.0	325.4	349.1	304.2	323.4
Annual.....	182.2	235.8	282.3	311.1	320.3	361.1	228.7	230.4	302.2	325.2	276.5	305.9

<sup>1</sup> Preliminary.

Source: Department of Commerce, Office of Business Economics; published currently in the Survey of Current Business.

## CONSUMERS' COOPERATIVES

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 No. 1012.—ESTIMATED MEMBERSHIP AND BUSINESS OF CONSUMERS' COOPERATIVES,  
BY TYPE OF ASSOCIATION: 1947

TYPE OF ASSOCIATION	Total number of associations	Number of members (1,000)	Amount of business (\$1,000)	TYPE OF ASSOCIATION	Total number of associations	Number of members (1,000)	Amount of business (\$1,000)
<b>LOCAL ASSOCIATIONS</b>							
Retail distributive.....	3,985	2,208	1,050,300	Telephone (mutual and coop.).....	33,000	675	
Stores and buying clubs.....	2,500	1,250	715,000	Credit unions <sup>5</sup> .....	9,040	3,340	10,000
Petroleum associations.....	1,400	925	320,000	Insurance associations.....	2,000	11,200	455,834
Other <sup>1</sup> .....	85	33	15,300				10 207,000
Service.....	793	357	25,503				
Rooms and/or meals.....	200	25	6,100				
Housing.....	125	10	2,300				
Medical and/or hospital care:							
On contract.....	60	100	1,800				
Own facilities.....	75	65	6,000				
Burial: <sup>3</sup>							
Complete funeral.....	36	30	355				
Caskets only.....	3	1	6				
Burial on contract.....	4	2	42				
Cold storage <sup>4</sup> .....	180	107	7,000				
Other <sup>5</sup> .....	110	17	1,200				
Electric light and power <sup>6</sup> .....	1,029	72,031	113,704				

<sup>1</sup> Such as consumers' dairies, creameries, bakeries, fuel yards, lumber yards, etc.

<sup>2</sup> Gross income.

<sup>3</sup> Local associations only; excludes associations of federated type (included with service federations) and funeral departments of store associations.

<sup>4</sup> Excludes cold-storage departments of other types of associations.

<sup>5</sup> Such as water supply, cleaning and dyeing, recreation, printing and publishing, nursery schools, etc.

<sup>6</sup> Data furnished by Rural Electrification Administration; figures include 36 refrigeration associations.

<sup>7</sup> Number of patrons. <sup>8</sup> Actual figures, not estimates. <sup>9</sup> Number of policyholders. <sup>10</sup> Premium income.

<sup>11</sup> Includes wholesale distributive, retail distributive, and service business.

Source: Department of Labor, Bureau of Labor Statistics; annual figures published in Monthly Labor Review.

No. 1013.—DEPARTMENT STORE SALES—INDEXES OF SALES, BY FEDERAL RESERVE DISTRICTS, 1928 TO 1948, AND BY MONTHS, 1944 TO 1948

[1935-39 average=100. Based on value figures. Monthly data adjusted for seasonal variation]

YEAR	United States	Boston	New York	Philadelphia	Cleveland	Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
1928.....	115	126	124	127	110	95	100	114	120	110	119	103	111
1929.....	117	128	129	128	116	96	98	116	122	110	117	104	112
1930.....	108	123	126	118	105	92	91	101	110	105	111	96	104
1931.....	97	114	116	105	93	86	79	88	97	98	96	81	92
1932.....	75	90	91	83	68	68	60	67	76	79	74	61	69
1933.....	73	84	86	80	69	68	62	68	72	76	73	62	66
1934.....	82	90	91	88	81	81	78	79	83	85	85	76	74
1935.....	88	92	93	91	86	87	84	86	85	90	89	80	88
1936.....	100	100	101	102	101	98	97	100	97	99	99	97	99
1937.....	107	104	106	107	111	105	105	109	106	104	107	105	106
1938.....	99	100	99	96	96	101	103	98	102	101	100	106	101
1939.....	106	104	101	104	106	109	113	107	111	106	105	112	109
1940.....	114	108	106	111	114	120	123	116	119	109	110	116	119
1941.....	133	126	119	129	138	144	145	135	143	123	127	138	139
1942.....	150	140	128	143	153	170	162	149	158	129	149	157	171
1943.....	168	148	135	151	167	194	204	161	179	148	184	212	204
1944.....	187	162	150	167	182	216	244	176	200	164	205	245	224
1945.....	207	176	169	184	201	236	275	193	227	185	229	275	248
1946.....	264	221	220	235	257	292	345	250	292	247	287	352	311
1947.....	286	234	239	261	281	304	360	275	314	273	311	374	336
1948.....	302	239	248	283	303	321	386	290	335	288	325	404	353

YEAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States:												
1944.....	174	171	177	176	185	178	185	189	192	194	199	200
1945.....	198	206	213	185	190	202	212	202	206	214	220	220
1946.....	228	249	254	254	258	274	270	292	273	260	271	277
1947.....	266	267	272	278	290	287	285	284	294	279	302	304
1948.....	286	286	284	306	310	311	315	312	312	306	287	310

Source: Board of Governors of the Federal Reserve System and Federal Reserve Bank in each district. Published currently in Federal Reserve Bulletin.

## DISTRIBUTION AND SERVICES

No. 1014.—SERVICE ESTABLISHMENTS—SUMMARY, BY SERVICE GROUPS AND KIND OF BUSINESS: 1939

[See headnote, table 1015]

KIND OF BUSINESS	Number of establishments	Receipts (thousands of dollars)	Active proprietors of unincorporated businesses	Employees, full-time and part-time (average for year) <sup>1</sup>	PAY ROLL (THOUSANDS OF DOLLARS) <sup>1</sup>		
					Total	Full-time	Part-time
All kinds of business, total	2,646,028	23,420,417	652,491	1,102,047	1,069,887	961,467	108,420
Personal services:							
Barber shops	117,998	230,983	124,596	68,786	55,557	51,406	4,151
Barber and beauty shops	4,199	18,618	4,821	9,289	7,321	6,972	349
Baths and masseurs' establishments (Turkish, etc.)	1,600	5,979	1,557	2,106	1,048	1,541	107
Beauty parlors	83,071	231,670	85,419	99,296	74,496	69,286	5,210
Cleaning, dyeing, pressing, alteration, and repair shops	52,516	140,578	52,308	29,662	21,478	17,977	3,501
Cleaning and dyeing plants <sup>3</sup>	11,604	182,698	11,845	82,810	80,014	76,038	3,976
Cleaning and renovating hats	1,288	4,374	1,306	1,498	1,531	1,015	911
Costume and dress-suit rental agencies	417	4,070	387	1,003	1,321	1,107	214
Funeral directors, embalmers, and crematories	18,196	261,617	18,239	32,843	40,676	37,483	3,193
Fur repair and storage shops	2,180	12,076	2,186	2,270	2,294	1,808	426
Laundries, hand	15,245	45,783	17,498	11,667	7,515	6,408	1,107
Laundries, power, total <sup>3</sup>	6,773	453,579	5,174	249,008	238,000	227,392	6,214
Doing linen supply service only	352	37,141	198	13,342	14,970	14,909	61
Doing 50 percent or more linen supply service	92	16,691	61	6,401	7,904	7,709	105
Doing less than 50 percent linen supply service	855	92,983	538	52,127	48,944	47,852	1,002
Doing no linen supply service	5,474	306,764	4,377	177,138	161,788	150,922	4,866
Linen supply service without laundry facilities	718	28,391	346	5,287	7,941	7,877	64
Photographic studios	10,987	64,185	10,417	14,579	15,690	14,017	1,073
Rug cleaning establishments <sup>3</sup>	1,012	10,618	949	3,429	3,968	3,001	367
Shoe repair shops	50,115	106,737	49,695	18,194	13,349	12,112	1,237
Shoe shine parlors	7,968	8,210	8,064	2,896	1,133	952	181
Travel bureaus (including ticket agents and brokers)	741	9,173	624	1,656	2,753	2,650	103
Other personal services	3,061	8,972	2,942	2,525	2,184	2,022	162
Business services:							
Adjustment and credit bureaus, and collection agencies	2,576	48,135	1,732	18,548	23,238	22,754	484
Advertising agencies	1,628	97,372	1,070	16,636	53,546	52,802	654
Auctioneers' establishments (service only)	970	5,213	996	3,201	1,059	1,073	586
Billboard advertising service	679	46,844	386	8,688	14,836	14,313	523
Blueprinting and photostat laboratories	500	12,961	387	3,093	3,978	3,017	61
Booking agents' offices (theatrical, etc.)	520	10,545	461	1,538	3,863	3,715	148
Coin-operated machine rental and repair service	1,554	30,576	1,606	4,177	5,852	5,729	123
Cotton compresses	315	29,183	4	13,501	9,677	6,558	3,119
Court reporting and public stenographic agencies	1,329	4,707	1,341	780	891	701	190
Dental laboratories	2,080	26,759	2,208	6,826	9,106	8,067	139
Detective agencies	280	4,128	184	2,559	2,677	1,851	826
Disinfecting and exterminating service	952	11,143	748	3,640	4,006	4,149	457
Duplicating, addressing, mailing, and mailing list service	1,433	17,582	1,404	8,324	7,050	6,005	1,045
Employment agencies	1,424	7,861	1,419	1,990	2,777	2,664	113
Photo finishing laboratories	1,201	16,111	1,180	4,661	4,561	4,110	451
Sign painting shops	5,391	16,803	5,741	3,311	3,488	2,713	775
Window cleaning service	823	11,781	860	6,316	6,895	6,328	507
Window display service	215	3,059	192	884	1,199	965	234
Other business services	4,772	148,211	3,472	52,165	61,428	52,247	9,181
Services allied to transportation:							
Packing and crating service	110	3,146	79	1,671	1,213	825	388
Stevedoring service	198	53,701	34	54,796	38,612	8,152	30,460
Stockyard service	95	15,674	59	3,586	4,922	4,616	306
Warehousing, cold storage	908	29,870	539	7,149	9,923	6,344	579
Warehousing, cotton	453	4,953	261	1,892	1,337	987	350
Warehousing, farm products	291	6,810	99	2,441	2,670	2,287	383
Warehousing, other	1,752	50,713	738	20,341	23,930	20,728	3,202
Weighing service	140	2,196	122	1,328	1,103	569	534
Other services allied to transportation	119	5,134	21	2,421	2,596	2,356	240
Automotive repairs and services:							
Automobile brake repair shops	487	4,876	500	896	1,162	1,125	37
Automobile laundries	960	2,941	987	1,490	889	603	196
Automobile paint shops	1,300	6,220	1,466	1,705	1,731	1,480	251
Automobile radiator shops	1,089	4,631	1,133	895	982	922	60
Automobile rental service	648	20,251	380	3,919	5,393	4,909	484
Automobile repair shops (general)	51,827	228,214	55,389	42,919	43,461	40,470	2,991
Automobile storage garages	4,821	70,315	8,844	15,900	18,193	17,541	652
Automobile top and body repair shops	6,232	44,678	7,067	11,905	13,683	12,693	990

For footnotes, see next page.

## SERVICE ESTABLISHMENTS

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## No. 1014.—SERVICE ESTABLISHMENTS—SUMMARY, BY SERVICE GROUPS AND KIND OF BUSINESS: 1939—Continued

[See headnote, table 1015]

KIND OF BUSINESS	Number of establish- ments	Receipts (thou- sands of dollars)	Active proprie- tors of unin- corpo- rated busi- nesses	Employ- ees, full- time and part- time (average for year) <sup>1</sup>	PAY ROLL (THOUSANDS OF DOLLARS) <sup>1</sup>		
					Total	Full- time	Part- time
Automotive repairs and services—Con.							
Battery and ignition repair shops	2,073	10,228	2,201	1,643	1,597	1,502	95
Parking lots	6,274	31,755	4,282	8,470	6,961	6,375	586
Tire repair shops	2,215	8,222	2,363	1,178	1,064	974	90
Wheel, axle, and spring repair shops	413	5,040	424	1,092	1,572	1,523	49
Other automotive repairs	542	8,521	548	723	826	787	39
Other repair services (except automobile, apparel, and shoes):							
Armature rewinding shops	978	12,873	1,033	3,090	3,783	3,507	186
Bicycle repair shops	1,601	3,435	1,621	479	307	269	38
Blacksmith shops	16,797	22,567	17,266	3,632	2,627	2,282	345
Boat repair shops	494	3,418	451	1,043	1,227	997	230
Electrical appliance repair shops	3,615	16,926	3,732	3,149	3,496	3,166	330
Harness and leather goods repair shops	2,168	3,809	2,178	349	249	218	31
Locksmith and gunsmith shops	2,252	5,261	2,248	738	722	686	36
Musical instrument repair shops	461	1,033	476	100	109	101	8
Piano and organ tuning and repair service	521	913	536	116	122	108	14
Radio repair shops	10,732	21,687	11,000	2,591	2,004	1,758	246
Refrigerator service and repair shops	1,297	9,222	1,410	1,846	2,338	2,211	127
Saw and tool sharpening and repair shops	1,451	3,875	1,501	679	882	824	58
Stove repair shops	365	977	380	200	173	152	21
Typewriter repair shops	618	2,322	643	433	423	398	25
Upholstery and furniture repair shops	9,695	35,095	10,261	7,202	6,915	5,753	1,162
Watch, clock, and jewelry repair shops	12,485	29,902	12,530	2,803	2,946	2,753	193
Sewing machine repair shops	355	1,058	361	118	136	132	4
Other repair services	6,749	24,079	6,895	4,994	5,047	4,958	689
Custom industries: <sup>4</sup>							
Awnings and tent manufacturing establishments (including repairs)	942	6,872	903	1,667	1,626	1,425	201
Bookbinding establishments	314	1,018	340	310	246	211	35
Bottling works	705	2,031	722	499	328	260	68
Cabinetmaking shops (including wood working)	2,882	6,430	3,049	1,201	976	768	208
Cider mills and presses	241	177	244	50	23	13	10
Custom slaughtering establishments	268	356	285	151	83	66	17
Grist mills	9,217	9,872	7,777	3,512	1,099	819	280
Hemstitching, embroidering, and button holing shops	808	1,846	842	677	404	298	106
Machine shops	3,117	9,056	3,354	2,100	1,855	1,600	255
Mattress renovating and repair shops	1,336	5,524	1,473	1,350	987	839	128
Metal plating shops	379	1,469	412	397	389	335	54
Neon sign manufacturing establishments (including repairs)	359	3,156	360	670	901	842	59
Printing and publishing shops	13,570	35,351	31,835	9,046	5,441	4,441	1,000
Sawmills and planing mills (including contract logging)	12,775	19,605	13,097	21,516	6,820	3,452	2,868
Tinsmith shops	1,483	3,999	1,547	827	606	395	211
Tire retreading shops	863	11,621	860	1,957	2,142	2,073	69
Wearing apparel contract work shops	518	1,501	604	953	536	295	241
Welding shops	4,118	16,102	4,357	3,203	3,437	3,065	372
Other custom and manufacturing industries	11,908	35,154	11,356	12,183	7,984	6,344	1,620
Miscellaneous services:							
Circulating libraries	783	3,067	709	505	435	402	33
Interior decorating service	461	4,365	454	603	783	671	112
Landscape gardening and tree surgery service	1,148	13,574	1,194	5,360	5,789	5,007	782
Livery stables	201	1,204	195	360	275	256	19
Taxidermists	363	853	364	171	197	170	27
Other miscellaneous services	3,377	36,788	3,197	10,935	13,853	12,328	1,525

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.<sup>2</sup> Statistics for 1935, adjusted for comparison, are as follows: Number of establishments, 631,309; receipts \$3,000,699,000. The adjustment was made by revising the original 1935 figures to include certain kinds of business that were not included in the Service Census but were published in other census reports and by excluding others which were within the scope of the 1935 census but were omitted from the 1939 census. For a comparison of the two items by industries, see source.<sup>3</sup> For figures for earlier years, see table 1018, p. 922.<sup>4</sup> Includes manufacturing plants with products valued at less than \$5,000 and therefore not covered by the Census of Manufactures.

## No. 1015.—SERVICE ESTABLISHMENTS—SUMMARY, BY STATES: 1939

[The census of service establishments covers a heterogeneous group of establishments (see table 1014) engaged primarily in the sale of service, as distinguished from establishments dealing in merchandise. The professional field, the financial, educational, transportation, construction, and diverse other fields of business activity, many of which are covered elsewhere, are not included. Owing to differences in the scope of the 1935 and 1939 censuses of service establishments, the aggregates for 1939 are not comparable with those for 1935 as published in the 1937-40 issues of the Abstract.]

DIVISION AND STATE	Number of establish- ments	Receipts (thousands of dollars)	Active proprie- tors of unincor- porated busi- nesses	Employ- ees, full- time and part- time (average for year) <sup>1</sup>	PAY ROLL (THOUSANDS OF DOLLARS) <sup>1</sup>		
					Total	Full-time	Part-time
United States	2,646,028	2,342,0417	652,491	1,102,047	1,069,887	961,467	108,420
New England							
Maine	45,365	235,821	44,593	68,991	69,513	62,707	6,806
4,303	14,701	4,239	4,642	3,814	3,138	676	
New Hampshire	2,204	9,429	2,268	2,974	2,418	2,210	208
Vermont	1,785	5,982	1,797	1,544	1,239	1,104	135
Massachusetts	24,783	138,433	24,211	41,030	42,566	37,960	4,597
Rhode Is <sup>and</sup>	3,938	21,243	3,886	6,128	6,098	5,654	444
Connecticut	8,352	46,083	8,192	12,678	13,378	12,632	746
Middle Atlantic	160,913	1,003,170	165,216	277,263	326,727	294,758	31,969
New York	92,900	655,540	90,540	177,285	225,816	203,413	22,403
New Jersey	22,864	124,530	22,180	35,019	40,081	36,309	3,682
Pennsylvania	45,149	213,100	46,496	61,959	60,830	54,946	5,884
East North Central	129,615	729,873	130,902	211,989	226,253	210,817	15,436
Ohio	34,174	175,094	34,463	50,574	52,174	48,080	4,094
Indiana	16,602	64,131	17,164	20,434	17,479	16,313	1,166
Illinois	42,697	294,956	43,140	84,810	98,074	91,932	6,142
Michigan	22,624	133,271	22,533	38,153	41,725	39,147	2,578
Wisconsin	13,458	62,421	13,602	18,018	16,801	15,345	1,456
West North Central	71,447	282,243	73,073	89,705	77,205	71,141	6,064
Minnesota	14,063	63,963	14,580	18,006	18,111	16,607	1,504
Iowa	13,756	47,727	14,185	13,412	10,854	9,860	994
Missouri	20,498	98,936	20,606	34,665	31,378	29,284	2,144
North Dakota	2,500	6,643	2,553	1,760	1,407	1,298	109
South Dakota	2,964	8,205	2,990	2,560	1,750	1,593	157
Nebraska	7,619	26,372	7,820	8,511	6,715	6,144	571
Kansas	10,047	30,397	10,333	10,191	6,990	6,405	585
South Atlantic	62,332	307,972	60,189	137,394	102,304	91,775	10,529
Delaware	1,444	6,758	1,388	1,977	1,799	1,664	135
Maryland	8,497	45,218	8,415	17,461	15,498	13,203	2,295
District of Columbia	3,830	39,491	3,723	13,610	14,858	14,237	571
Virginia	9,183	44,230	8,840	20,822	15,189	12,813	2,370
West Virginia	5,192	19,662	5,116	6,708	5,713	5,359	354
North Carolina	10,502	42,121	10,259	21,701	13,770	12,460	1,310
South Carolina	5,351	18,877	5,063	10,730	5,982	5,362	620
Georgia	10,098	45,057	9,465	23,440	14,382	12,942	1,440
Florida	8,235	46,558	7,940	20,765	15,113	13,035	1,428
East South Central	34,169	130,325	32,935	63,390	39,614	34,684	4,930
Kentucky	9,364	34,093	9,205	13,385	9,760	8,893	867
Tennessee	9,415	44,037	9,372	20,027	13,632	12,549	1,083
Alabama	9,001	31,361	8,282	17,977	9,961	8,178	1,783
Mississippi	6,389	20,834	6,076	11,091	6,261	5,064	1,197
West South Central	55,884	232,235	56,930	102,248	69,934	62,320	7,614
Arkansas	6,696	22,072	6,829	9,702	5,933	5,049	884
Louisiana	6,887	36,402	6,766	18,552	12,786	11,039	1,747
Oklahoma	10,726	35,963	10,989	13,321	9,742	8,900	752
Texas	31,575	137,198	32,346	60,013	41,473	37,242	4,231
Mountain	18,568	82,924	19,035	25,738	23,005	21,167	1,838
Montana	2,632	10,358	2,754	2,522	2,413	2,121	202
Idaho	2,140	8,630	2,227	2,397	2,038	1,889	149
Wyoming	1,199	4,467	1,263	1,329	1,073	974	99
Colorado	6,186	27,473	6,333	9,422	8,221	7,648	573
New Mexico	1,612	6,352	1,575	2,202	1,714	1,584	130
Arizona	1,819	10,880	1,867	3,283	3,185	2,943	242
Utah	2,387	11,416	2,399	3,753	3,392	3,151	241
Nevada	593	3,348	617	830	969	857	112
Pacific	67,735	415,854	69,608	125,329	135,332	112,098	23,234
Washington	10,256	53,510	10,264	19,351	17,175	13,218	3,957
Oregon	6,256	34,203	6,428	11,376	10,910	8,788	2,122
California	51,223	328,141	52,916	94,602	107,247	90,052	17,155

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses. <sup>2</sup> See note 2, table 1014.

## SERVICE TRADE

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## No. 1016.—SERVICE TRADE—EMPLOYMENT BY SIZE OF ESTABLISHMENT, BASED ON NUMBER EMPLOYED: 1939

[See headnote, table 1015]

NUMBER OF EMPLOYEES PER ESTABLISHMENT	ESTABLISHMENTS		Number of proprietors of unincorporated businesses	Number of employees
	Number	Percent of total		
Total.....	646,028	100.0	652,491	1,102,047
20 or more.....	7,758	1.2	3,035	489,871
8-19.....	12,087	1.9	8,147	139,000
6-7.....	9,563	1.5	8,212	62,836
4-5.....	22,290	3.4	19,613	96,757
3.....	26,546	4.2	24,743	79,509
2.....	54,076	8.4	51,036	106,242
1.....	147,865	22.9	146,466	126,812
No paid employees.....	365,243	56.5	391,230	-----

<sup>1</sup> Or fraction on monthly average basis.

Source: Department of Commerce, Bureau of the Census; Census of Business, 1939, Vol. III, Service Establishments.

## No. 1017.—PLACES OF AMUSEMENT—SUMMARY, BY KIND OF BUSINESS: 1939

[The census covers places of amusement, except those operated by educational institutions; religious, charitable, or fraternal agencies; governmental or civic bodies; and nonprofit organizations]

KIND OF BUSINESS	Number of establishments	Receipts (thousands of dollars)	Active proprietors of unincorporated businesses	Employees, full-time and part-time (average for year) <sup>1</sup>	PAY ROLL (THOUSANDS OF DOLLARS) <sup>1</sup>		
					Total	Full-time	Part-time
Total.....	44,917	998,079	33,971	223,229	225,481	205,211	20,270
Amusement devices.....	1,093	7,314	705	1,600	1,504	1,363	141
Amusement parks.....	245	10,123	148	3,798	2,997	2,535	462
Bands and orchestras.....	550	4,946	831	3,467	3,654	2,978	676
Bathing beaches (not including municipal).....	344	1,994	264	682	534	465	69
Bicycle rentals.....	247	433	247	76	46	41	5
Billiard and pool parlors.....	12,998	88,631	12,773	9,261	5,892	5,348	544
Boat and canoe rental service.....	1,382	1,944	1,341	413	276	211	65
Bowling alleys.....	4,646	48,819	4,037	31,557	17,347	12,862	4,485
Clubs, baseball (professional).....	276	24,940	36	6,430	10,942	9,910	1,032
Dance halls, studios, and academies.....	2,191	14,156	2,029	8,128	4,498	2,872	1,626
Race tracks, automobile.....	36	978	24	337	132	51	81
Race tracks, dog.....	11	2,775	3	314	720	633	87
Race tracks, horse.....	45	40,732	3	3,795	7,312	6,028	1,284
Riding academies.....	840	2,875	765	1,108	777	722	55
Shooting galleries.....	324	850	255	207	160	148	12
Skating rinks, ice.....	50	1,693	24	493	503	441	62
Skating rinks, roller.....	1,184	6,550	1,088	2,624	1,641	1,243	398
Sports and athletic fields.....	78	5,845	35	1,354	1,355	1,145	210
Sports promoters.....	110	3,409	78	1,623	575	236	339
Swimming pools (not including municipal).....	668	2,815	516	1,009	712	572	140
Theaters, motion-picture (including motion-picture theaters with vaudeville).....	15,115	678,045	6,717	125,184	131,583	124,165	7,418
Theaters, legitimate stage and opera; and theatrical productions.....	231	32,461	88	4,579	11,459	11,267	192
Other places of amusement <sup>2</sup> .....	2,294	70,751	1,909	15,190	20,862	19,975	887

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.<sup>2</sup> Includes statistics for New York World's Fair and Golden Gate International Exposition.

Source: Department of Commerce, Bureau of the Census; Census of Business, 1939; separate report, Places of Amusement, and Vol. III, Service Establishments.

## DISTRIBUTION AND SERVICES

## No. 1018.—POWER LAUNDRIES, CLEANING AND DYEING ESTABLISHMENTS, AND RUG CLEANING ESTABLISHMENTS—SUMMARY: 1919 TO 1939

[All money figures in thousands of dollars. Statistics cover establishments reporting receipts of \$5,000 or more except for 1939 figures in italics, which represent establishments reporting receipts of \$100 or more. The Census of Business for 1939 classified the establishments shown in this table as service establishments and covered those reporting receipts of \$100 or more. See also table 1014 for statistics for 1939. Statistics for 1935 and earlier years were compiled in connection with the Census of Manufactures. Rug cleaning was treated, in general, as an activity of the power laundry industry for 1929 and earlier years]

YEAR	Number of establish- ments	Propri- etors and firm mem- bers	Salaried employees	Wage earners (average for year)	Salaries	Wages	Cost of sup- plies, fuel, and pur- chased electric energy	Cost of contract work	Re- ceipts for work done
<b>Power laundries:</b>									
1919	4,881	(1)	(1)	130,480	(1)	91,926	52,842	1,555	233,816
1925	4,869	3,851	15,412	169,200	31,613	162,466	55,407	1,107	362,295
1929	6,776	5,220	21,964	233,187	49,833	228,861	80,265	(2)	541,168
1935	6,316	4,244	19,920	208,354	34,586	154,791	62,796	2,356	369,452
1939	5,976	4,333	(3)	247,007	(1)	233,076	(1)	(1)	451,616
<i>1939</i>	<i>6,773</i>	<i>5,174</i>	<i>(3)</i>	<i>249,008</i>	<i>(1)</i>	<i>253,806</i>	<i>(1)</i>	<i>(1)</i>	<i>453,579</i>
<b>Cleaning and dyeing estab- lishments:</b>									
1919	1,748	(1)	(1)	18,408	(1)	17,866	11,511	461	53,183
1925	2,406	2,263	5,769	29,386	10,550	37,590	15,188	814	102,394
1929	5,296	4,912	9,244	59,148	20,390	75,931	26,897	(3)	201,255
1935	5,510	4,980	9,334	57,286	12,483	49,702	21,056	1,129	130,657
1939	7,219	7,280	(3)	78,492	(1)	77,649	(1)	(1)	171,072
<i>1939</i>	<i>11,604</i>	<i>11,845</i>	<i>(3)</i>	<i>82,810</i>	<i>(1)</i>	<i>80,014</i>	<i>(1)</i>	<i>(1)</i>	<i>182,688</i>
<b>Rug cleaning establishments:</b>									
1935	506	395	670	2,344	1,136	2,260	1,211	90	8,001
1939	498	406	(3)	3,108	(4)	4,300	(1)	(1)	9,317
<i>1939</i>	<i>1,012</i>	<i>949</i>	<i>(3)</i>	<i>3,429</i>	<i>(4)</i>	<i>4,898</i>	<i>(1)</i>	<i>(1)</i>	<i>10,618</i>

<sup>1</sup> No comparable data.

<sup>2</sup> Included in figure for cost of supplies, fuel, and purchased electric energy.

<sup>3</sup> Data for "Salaried employees" included in "Wage earners (average for year)."

<sup>4</sup> Data for "Salaries" included in "Wages."

Source: Department of Commerce, Bureau of the Census; 1935 and earlier years, reports of Biennial Census of Manufactures; 1939, Census of Business, separate report, Power Laundries, etc., and Vol. III, Service Establishments.

## No. 1019.—HOTELS—SUMMARY, 1929 TO 1939, AND BY SIZE, 1939

[The census coverage of hotels is restricted, in the main, to establishments which are designated as hotels and which provide hotel accommodations as their major business activity. For 1935 and 1939, the canvass was limited to hotels having at least 6 guest rooms or having receipts from room rentals amounting to at least \$500 for a full year's operations. Because of differences in coverage for 1929, 1933, 1935, and 1939, comparable data are available only for year-round hotels having 25 or more guest rooms]

YEAR	Number of hotels	Number of guest rooms	Receipts (thous- ands of dollars)	Employees, full-time and part-time (average for year) <sup>1</sup>	Total pay roll (thous- ands of dollars) <sup>1</sup>
<b>All hotels:</b>					
1935	28,822	1,428,646	720,145	291,165	191,845
1939	27,987	1,444,390	863,155	338,020	243,228
<b>Year-round hotels with 25 or more guest rooms:<sup>2</sup></b>					
1929	11,873	1,005,684	873,508	367,903	232,137
1933	10,680	890,866	398,674	300,183	118,489
1935	11,373	934,661	565,317	324,491	158,400
<i>1939</i>	<i>11,836</i>	<i>983,756</i>	<i>686,305</i>	<i>279,155</i>	<i>202,997</i>

ITEM	SIZE OF HOTEL, 1939 (NUMBER OF GUEST ROOMS)			
	Less than 25 rooms	25 to 49 rooms	50 to 99 rooms	100 to 209 rooms
				300 rooms and over
Number of hotels	12,136	8,156	4,626	2,521
Receipts (1,000 dollars)	62,275	78,987	119,631	343,310
Active proprietors of unincorporated businesses	12,025	7,702	3,350	907
Employees, full-time and part-time (average for year) <sup>1</sup>	20,285	30,273	47,578	108,468
				131,435

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.

<sup>2</sup> No data included for California, as comparable figures for all years are not available.

<sup>3</sup> Based on number of employees for April, July, October, and December.

Source: Department of Commerce, Bureau of the Census; Census of Business, 1939; separate report, Hotels, and Vol. III, Service Establishments.

## No. 1020.—HOTELS—SUMMARY, BY STATES: 1939

[See headnote, table 1019]

DIVISION AND STATE	Number of hotels	Number of guest rooms	RECEIPTS (THOUSANDS OF DOLLARS)					Active proprietors of unincorporated businesses	Employees, full-time and part-time (average for year) <sup>1</sup>	Total pay roll (thousands of dollars) <sup>1</sup>
			Total	Room rentals and sale of meals <sup>2</sup>	Sale of beverages	Sale of merchandise	Other			
United States	27,987	1,444,390	863,155	685,953	107,505	15,996	53,701	24,018	338,029	243,228
Year-round hotels	25,036	1,312,410	816,498	644,915	104,934	14,865	51,784	21,281	322,476	233,258
Seasonal hotels	2,951	131,980	46,657	41,088	2,571	1,131	1,917	2,737	15,553	9,970
New England	1,523	68,846	49,899	37,329	9,891	.717	1,962	1,239	19,641	14,119
Maine	402	15,463	6,493	5,236	1,050	111	96	363	2,552	1,527
New Hampshire	241	9,089	4,315	3,716	371	112	116	220	1,744	1,062
Vermont	129	4,725	2,949	2,249	530	122	48	111	1,249	726
Massachusetts	494	27,422	26,798	19,370	5,906	285	1,237	341	10,619	7,949
Rhode Island	56	3,026	3,109	2,025	828	7	249	42	1,123	971
Connecticut	201	9,121	6,235	4,733	1,206	80	216	162	2,354	1,884
Middle Atlantic	4,346	300,700	254,040	194,142	41,417	2,567	15,914	3,719	89,367	73,581
New York	2,320	202,181	183,215	141,085	28,421	1,363	12,346	1,870	60,322	53,732
New Jersey	951	45,592	27,263	22,661	3,147	322	1,123	809	11,080	7,305
Pennsylvania	1,075	52,927	43,572	30,396	9,849	882	2,445	950	18,015	12,544
East North Central	4,035	271,170	168,724	129,395	23,787	3,620	11,922	3,237	68,736	52,522
Ohio	801	51,704	38,247	28,449	6,143	937	2,718	625	16,528	12,356
Indiana	507	26,631	15,078	11,665	2,092	479	842	404	6,648	4,285
Illinois	1,192	111,986	69,164	54,572	7,586	1,324	5,682	880	27,198	22,648
Michigan	865	54,440	29,137	21,999	4,920	460	1,753	747	11,915	8,680
Wisconsin	670	26,409	17,098	12,710	3,046	420	922	581	6,447	4,553
West North Central	3,410	146,604	72,796	58,122	8,435	2,044	4,195	3,022	31,466	19,607
Minnesota	804	30,685	19,030	14,880	2,816	439	898	723	7,547	5,499
Iowa	509	22,830	11,701	9,431	1,056	427	787	471	5,260	2,909
Missouri	828	41,877	22,608	17,904	2,706	496	1,442	670	10,331	6,833
North Dakota	232	7,143	2,995	2,289	443	144	119	222	1,093	597
South Dakota	194	6,727	2,517	1,365	255	120	177	168	991	555
Nebraska	384	15,311	7,834	6,137	1,022	230	445	354	3,310	1,817
Kansas	459	16,031	6,111	5,456	137	188	330	414	2,934	1,397
South Atlantic	3,192	154,398	97,712	83,338	7,138	1,751	5,485	2,527	40,948	24,336
Delaware	38	1,477	2,095	1,275	723	16	81	32	721	497
Maryland	211	9,479	8,182	6,200	1,066	152	414	180	3,792	2,242
District of Columbia	91	14,114	17,360	13,467	1,917	447	1,529	56	6,390	5,222
Virginia	410	17,149	11,658	10,369	328	316	645	323	5,439	2,912
West Virginia	244	11,247	6,025	5,315	137	166	407	183	3,024	1,897
North Carolina	373	15,745	8,750	8,054	163	83	450	308	4,349	1,924
South Carolina	144	6,285	3,604	3,458	54	21	131	110	1,950	825
Georgia	353	16,145	9,696	8,275	754	209	458	290	5,000	2,294
Florida	1,328	62,757	30,272	27,105	1,456	341	1,370	1,045	10,288	6,553
East South Central	1,049	44,756	26,961	23,316	1,294	705	1,646	886	14,014	6,680
Kentucky	319	12,613	7,989	6,518	755	159	562	282	3,743	2,239
Tennessee	317	15,480	10,029	8,779	192	313	745	257	5,288	3,355
Alabama	240	9,008	4,784	4,225	294	137	128	205	2,693	1,121
Mississippi	173	7,565	4,159	3,799	53	98	211	142	2,299	965
West South Central	2,994	108,906	53,570	44,652	2,757	1,600	4,561	2,636	25,238	13,175
Arkansas	334	11,784	5,620	4,661	235	282	442	312	2,722	1,313
Louisiana	285	11,109	9,541	7,279	1,214	180	908	242	4,307	2,454
Oklahoma	673	23,008	6,765	6,146	124	139	356	606	3,483	1,743
Texas	1,702	63,005	31,646	26,606	1,184	999	2,855	1,476	14,726	7,665
Mountain	2,565	89,907	37,145	30,031	3,263	1,275	2,576	2,331	13,705	9,325
Montana	492	16,433	4,876	3,078	502	178	158	485	4,598	1,193
Idaho	275	8,778	3,469	2,019	120	185	245	243	1,305	996
Wyoming	218	8,521	3,394	2,787	342	104	161	194	1,207	713
Colorado	722	26,488	9,097	7,789	792	130	386	676	3,853	2,420
New Mexico	229	6,775	3,650	2,893	418	232	107	184	1,599	834
Arizona	236	8,861	6,278	4,399	512	355	1,012	190	2,074	1,484
Utah	233	8,726	3,390	3,084	92	41	173	211	1,314	927
Nevada	100	5,325	2,901	2,182	425	50	334	148	755	758
Pacific	4,873	259,103	102,308	85,628	9,523	1,717	5,440	4,421	34,914	29,883
Washington	983	50,747	14,536	12,874	651	362	649	913	5,476	4,452
Oregon	494	24,521	8,010	7,361	191	159	299	456	3,201	2,250
California	3,306	183,835	79,762	65,393	8,681	1,196	4,492	3,052	26,237	23,181

<sup>1</sup> Employees and pay roll include paid executives of corporations but not number and compensation of proprietors of unincorporated businesses.<sup>2</sup> 10,105 hotels with total receipts of \$682,278,000 reported room rentals and sales of meals separately, as follows: Rentals, \$311,542,000; meals, \$209,102,000.

Source: Department of Commerce, Bureau of the Census; Census of Business, 1939; separate report, Hotels, and Vol. III, Service Establishments.

## 32. Manufactures

**Census of Manufactures.**—The basic source of comprehensive data on manufacturing production is the Census of Manufactures conducted by the Bureau of the Census. The first Census of Manufactures covered the year 1809 and a census was taken at 10-year intervals in connection with the Decennial Census of Population up to and including 1899, with the exception of 1829. It was conducted at 5-year intervals from 1904 through 1919, and every other year from 1921 through 1939, but was suspended during the war period. The 1947 Census of Manufactures is the first to be taken since 1939. Present legislation provides for a Census of Manufactures to cover the year 1953 and every fifth year thereafter.

The 1947 Census of Manufactures covered all establishments primarily engaged in manufacturing, as defined in the 1945 revision of the Standard Industrial Classification sponsored by the Bureau of the Budget. To the extent possible, this Census was conducted on an establishment basis. As a rule, the term "establishment" signifies a single plant or factory and is not necessarily identical with the business unit or company which may consist of one or more establishments. A company operating establishments at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if separate pay roll and inventory records are kept for each activity. Census figures differ, therefore, from those prepared on a company basis. They also differ to some extent from other tabulations based on establishment reports, where the definition of an establishment as to location and line of activity is not so rigidly applied.

In the 1947 census, reports were required from all establishments employing one or more persons at any time during the census year. In other recent censuses, establishments having less than \$5,000 value of products were designated as out of the scope of the census. The change in the minimum size limit in 1947 as compared with 1939 has not appreciably affected the comparability of the figures for these two years, except for data on number of establishments for a few industries.

Each of the establishments covered in the census was classified in one of 458 manufacturing industries in accordance with the industry definitions embodied in the Standard Industrial Classification system. Under this system of classification, an industry is generally defined as a group of establishments producing a single product or a more or less closely related group of products. This product or group of products is in turn said to be "primary" to that industry. Accordingly, an establishment is classified in a particular industry if its production of the primary products of that industry exceeds in value its production of any other group of products. In a few instances, however, the industry classification of an establishment is determined not only by the products it makes but also by the processes employed in making those products.

While some establishments produce only the primary products of the industry in which they are classified, it rarely happens that all the establishments in an industry specialize to this extent. The statistics on employment, pay rolls, value added, inventories, and expenditures, therefore, reflect not only the primary activities of the establishments in that industry but also their activities of a secondary nature. For this reason the industry statistics usually cannot be directly related to statistics on the total shipments of commodities.

Comparative figures shown for 1939 are generally slightly lower than those published in the 1939 reports. The 1939 figures have been revised to exclude retail bakeries, machine-shop repairs, and some other types of establishments also omitted from the 1947 census. Cost of materials and value of products for 1947 were not compiled for summary tables because of the duplication which arises in the combination of individual industries representing successive stages in the production of finished manufactures.

The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. Figures are, therefore, not shown for an industry or a geographic unit which is represented by only one or two companies, or by more companies when one or two companies produce a very large proportion of the combined output of all the companies. This restriction has no effect upon statistics by industry for the entire United States, or statistics for all industries within States and standard metropolitan areas. There are many instances, however, where this restriction makes it necessary to withhold figures for counties and cities, and for industries within States and areas.

**Current and other statistics.**—Monthly, quarterly, and annual commodity surveys are also conducted by the Bureau of the Census. These data are published currently in the Facts for Industry series. This series also includes releases of information collected by or for the War Production Board and successor agencies during the war and reconversion periods by the Census Bureau or other Federal agencies.

Reports on current activities of industries, or current movements of individual commodities, are also compiled by trade associations and trade journals, commercial agencies, and by such governmental bureaus as Labor Statistics, Agricultural Economics, Foreign and Domestic Commerce, Fish and Wildlife Service, Tariff Commission, and Internal Revenue, in addition to the Census Bureau previously mentioned.

Abbreviated balance sheet and income account data on all United States manufacturing corporations are compiled and published annually by the Bureau of Internal Revenue from corporation income and profits tax returns and holding company returns.

Data on financial operations and intercorporate relations of manufacturing corporations are collected from time to time by the Securities and Exchange Commission, the Tariff Commission, the Federal Trade Commission, and special investigating agencies. Financial statistics for certain manufacturing industries in the form of balance sheets, profit and loss statements, analyses of sales and expenses, lists of subsidiaries, types and amounts of security issues, and selected data on the salaries paid to officers and directors, are summarized and published for the leading corporations that are registered with the Securities and Exchange Commission. The Tariff Commission publishes commodity surveys which cover economic and competitive aspects of production, distribution, and international trade in selected important industries. Each survey deals with several products which are related because of the raw materials consumed, or competitive uses. The Federal Trade Commission has made several comprehensive studies of individual industries. Studies of individual industries have also been made by trade associations and private research agencies.

**Material in other sections.**—In addition to the statistics presented in this section, statistics on the output and activities of manufacturers will be found in various other sections of the Statistical Abstract. For example, data on wages and hours appear in section 8, Labor Force, Employment, and Pay Rolls; statistics on manufacturing corporations compiled from corporation income tax returns appear in section 14, National Government Finances; and statistics on lumber production in section 25, Forests and Forest Products. For page references to the commodity or industry, consult the index. For references to the important sources of statistics on manufacturing and related activities, see the listings under the appropriate subjects in the "Bibliography of Sources of Statistical Data," page 1054.

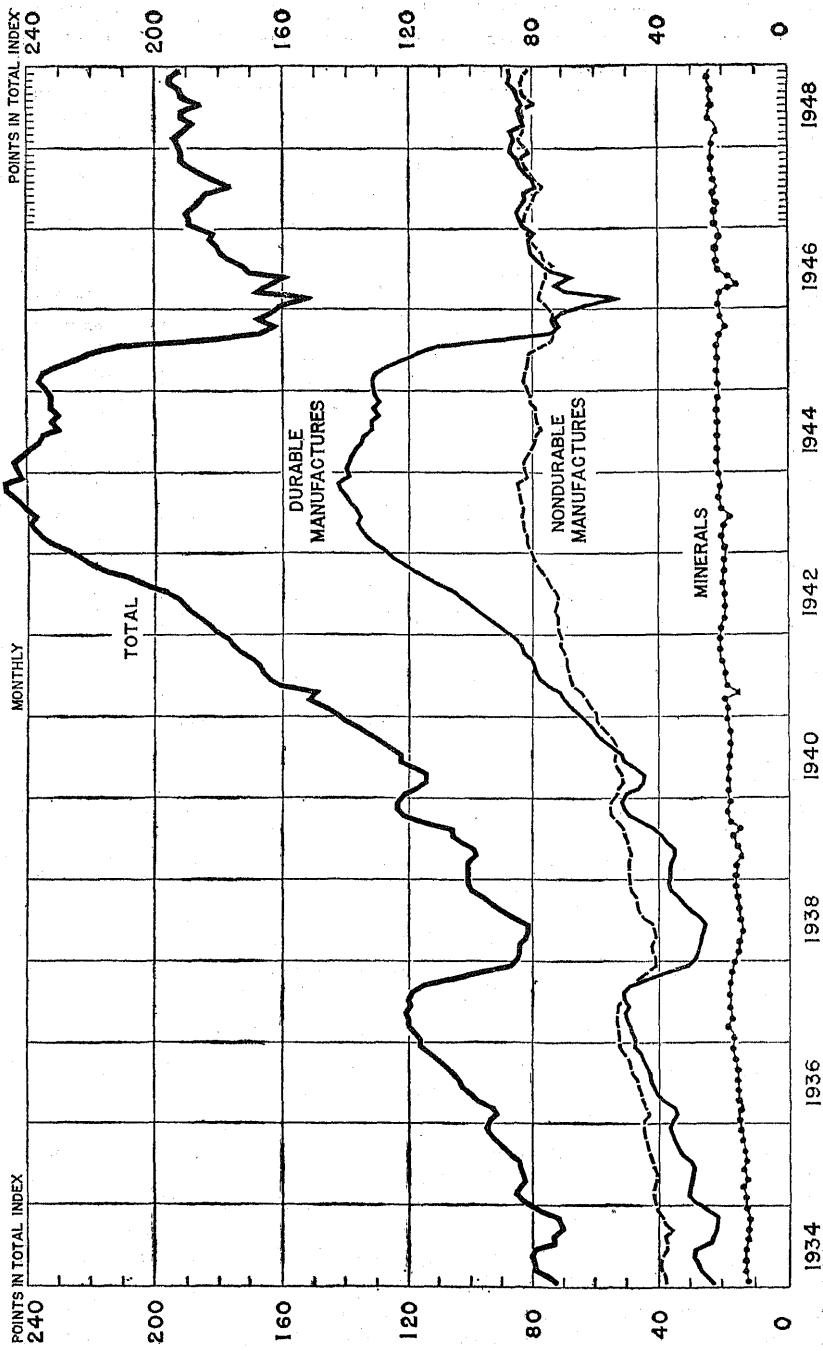
**Geographic coverage.**—Statistics in this section relate to continental United States except as noted.

**Historical statistics.**—In this section, tabular headnotes (as "See also *Historical Statistics*, series J 30-48") provide cross-references, where applicable, to *Historical Statistics of the United States, 1789-1945*. In that historical supplement to the Statistical Abstract, statistics are carried back year by year as far as possible. See also the historical appendix of the present issue of the Abstract for specific titles of series and the earliest year shown in the supplement.

## MANUFACTURES

FIGURE Z.—INDUSTRIAL PRODUCTION INDEXES: 1934 TO 1948

[Based on physical volume, adjusted for seasonal variation, 1935-39 average for total=100. See table 1023.]



Source: Board of Governors of the Federal Reserve System.

## MANUFACTURES—SUMMARY

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## No. 1021.—MANUFACTURES—SUMMARY: 1849 TO 1947

[Figures for 1849 to 1919 include establishments whose products were valued at \$500 or more; for 1921 to 1939, establishments whose products were valued at \$5,000 or more; for 1947, figures cover all establishments employing 1 or more persons at any time during year. For basis of revisions beginning 1889, see General Explanations, Sec. 13 in source volumes, "Statistics for 1889 and earlier years." See also 1948 Abstract and *Historical Statistics*, series J 1-12, for unrevised data for 1889 and earlier years]

CENSUS YEAR	Number of establishments	Number of proprietors and firm members	ALL EMPLOYEES <sup>1</sup>		PRODUCTION WORKERS		Value added <sup>2</sup> (\$1,000)
			Number (average for year) <sup>2</sup>	Salaries and wages (\$1,000)	Number (average for year)	Wages (\$1,000)	
Factories and hand and neighborhood industries:							
1849.....	123,025				957,059	236,755	463,983
1859.....	140,433		(4)	(4)	1,311,246	378,879	854,257
1869.....	252,148				2,053,996	620,467	1,395,119
1879.....	253,852				2,732,595	947,954	1,972,756
1889.....	353,864		4,586,494	2,209,058	4,129,355	1,820,854	4,102,301
1899.....	509,490		5,478,301	2,595,566	5,097,562	2,206,547	5,474,892
Factories, excluding hand and neighborhood industries:							
1899.....	204,750	(4)	4,850,019	2,258,654	4,501,919	1,892,574	4,646,981
1904.....	213,444	225,115	5,674,957	2,990,937	5,181,660	2,449,851	6,019,171
1909.....	264,810	272,421	7,012,066	4,105,470	6,261,736	3,205,213	8,160,075
1914.....	268,436	258,560	7,514,186	5,015,977	6,602,287	3,782,322	9,385,622
1919.....	270,281	249,865	9,336,801	12,426,902	8,404,016	9,064,009	23,841,624
1921.....	192,059	172,291	7,557,364	9,870,199	6,475,474	7,451,299	17,252,776
1923.....	192,096	147,958	9,474,058	12,906,460	8,194,170	10,148,624	24,509,487
1925.....	183,877	132,971	9,142,417	12,987,707	7,871,409	9,979,649	25,667,624
1927.....	187,029	132,151	9,072,052	13,123,135	7,848,070	10,009,465	26,325,394
1929.....	206,663	132,686	9,659,742	14,284,282	8,369,705	10,884,919	30,501,435
1931.....	171,450	(4)	(4)	(4)	6,163,144	6,688,541	18,000,532
1933.....	139,325	72,267	6,557,925	6,237,800	5,787,611	4,940,146	14,007,540
1935.....	167,916	81,521	8,282,295	9,564,754	7,203,794	7,311,320	18,552,553
1937.....	160,794	99,268	9,786,402	12,829,749	8,569,238	10,112,883	25,173,530
1939.....	173,802	123,655	8,952,706	12,706,102	7,808,205	8,997,515	24,486,856
1947.....	240,881	188,948	14,294,304	39,689,527	11,916,188	30,242,343	74,425,825

<sup>1</sup> Figures for 1939 and 1947 include data for employees of manufacturing establishments engaged in distribution and construction work. Extent to which data for such employees were included in figures for earlier years is not known.

<sup>2</sup> For 1939 and earlier years, data represent sum of average number of production workers for year and number of nonproduction workers reported for 1 pay-roll period (usually in October). For 1947, data represent average of 12 monthly figures.

<sup>3</sup> Value of products less cost of materials, supplies, fuel, electricity, and contract work. For 1849-1933, cost of contract work was not subtracted from value of products in calculating value added by manufacture.

<sup>4</sup> Not available. <sup>5</sup> Reduced to gold basis.

<sup>6</sup> Excludes data for salaried officers of corporations and their salaries; therefore not strictly comparable with figures for other years.

<sup>7</sup> Revised, on basis of retabulation of returns to exclude data for establishments classified as manufacturing in 1939 and prior years but classified as nonmanufacturing in 1947. Value added by manufacture prior to revision and on a basis comparable with 1937 and previous years, was \$24.7 billion.

<sup>8</sup> Number of proprietors and firm members not revised. Figures for "All employees" revised on basis of estimates rather than by retabulation of 1939 reports. (See footnote 7.)

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

## No. 1022.—POPULATION, WAGE EARNERS, AND PRODUCTION—INDEXES: 1899 TO 1939

[1899=100. See also *Historical Statistics*, series J 13 for indexes of production]

CENSUS YEAR	Population	Wage earners	Production (quantity) <sup>1</sup>	Production per wage earner	CENSUS YEAR	Population	Wage earners	Production (quantity) <sup>1</sup>	Production per wage earner
1899.....	100	100	100	100	1927.....	158	178	317	178
1904.....	110	115	124	108	1929.....	162	190	364	192
1909.....	121	139	158	114	1931.....	166	140	262	187
1914.....	131	147	186	127	1933.....	168	131	228	174
1919.....	140	191	222	116	1935.....	170	103	301	185
1921.....	145	147	194	132	1937.....	172	194	376	194
1923.....	149	186	280	151	1939.....	175	187	373	190
1925.....	164	178	298	167					

<sup>1</sup> Index of physical output from National Bureau of Economic Research.

Source: Department of Commerce, Bureau of the Census; 1939 Census of Manufactures, Vol. I.

## No. 1023.—INDUSTRIAL PRODUCTION—INDEXES, BY GROUPS: 1929 TO 1948

[1935-39 average=100. For discussion of revisions beginning 1939, see Federal Reserve Bulletin, Oct. 1943; for discussion of revisions for earlier years, see Bulletins for Aug. 1940 and Sept. 1941. Monthly data adjusted for seasonal variation. See also *Historical Statistics*, series J 30-48 and G 6-8.]

YEAR AND MONTH	Total	MANUFACTURES									Nondurable manu- factures			
		Durable manufactures												
		Total	Iron and steel	Machinery	Trans- portation equipment	Non- ferrous metal and products	Lum- ber and products	Stone, clay, and glass products				Total	Tex- tiles and products	Leath- er and products
1929	110	110	132	133	130	134	136	146	110	93	94	95		
1930	91	90	98	97	100	91	106	105	96	84	74	84		
1931	75	74	67	61	66	62	83	76	77	79	79	82		
1932	58	57	41	32	43	38	52	51	51	70	71	76		
1933	69	68	54	54	50	48	60	63	54	79	88	88		
1934	75	74	65	61	69	69	62	64	64	81	76	91		
1935	87	87	83	81	83	93	80	85	77	90	93	99		
1936	103	104	108	114	105	110	104	105	103	100	104	103		
1937	113	113	122	123	126	123	122	113	114	106	106	102		
1938	89	87	78	68	82	72	80	90	92	95	85	93		
1939	109	109	109	114	104	103	113	106	114	109	112	105		
1940	125	126	139	147	136	145	139	116	124	115	114	98		
1941	162	168	201	186	221	245	191	184	162	142	152	123		
1942	199	212	279	199	340	404	214	184	168	158	157	122		
1943	239	258	360	208	443	735	267	129	173	176	153	114		
1944	235	252	353	206	439	719	259	125	164	171	148	113		
1945	203	214	274	183	343	487	204	109	163	166	146	117		
1946	170	177	192	150	240	232	157	131	192	165	162	122		
1947	187	194	220	195	278	230	187	143	206	172	163	116		
1948	102	198	225	208	277	235	193	145	206	177	170	111		
March	191	200	229	207	283	240	201	151	211	177	175	115		
June	192	198	222	208	277	222	194	140	207	179	174	109		
September	192	199	225	214	273	231	192	143	207	178	168	119		
December	192	199	231	223	277	246	184	143	205	173	166	100		

YEAR AND MONTH	MANUFACTURES—continued								MINERALS				
	Nondurable manufactures—Continued												
	Manu- factured food prod- ucts	Alco- hol- ic bever- ages	To- bacco prod- ucts	Paper and prod- ucts	Print- ing and pub- lishing	Petro- leum and coal prod- ucts	Chem- ical prod- ucts	Rubber prod- ucts	Total	Fuels	Met- als		
1929	101		96	85	104	96	89	100	107	103	134		
1930	100		93	79	97	89	87	78	93	91	102		
1931	90		87	74	88	80	78	72	80	82	68		
1932	79		79	65	74	69	68	64	67	72	36		
1933	83		80	76	75	74	76	77	76	80	51		
1934	88	74	87	75	80	79	83	86	80	83	58		
1935	89	89	90	86	89	85	89	93	86	89	73		
1936	98	109	99	98	99	97	99	107	99	96	102		
1937	103	108	103	107	109	108	112	104	112	109	127		
1938	101	96	102	95	96	100	96	83	97	99	86		
1939	108	98	106	114	106	110	112	113	106	105	113		
1940	113	101	109	123	112	120	130	123	117	114	134		
1941	127	117	120	150	127	135	176	163	125	122	148		
1942	134	118	131	142	115	147	278	172	129	125	148		
1943	145	117	133	139	111	185	384	228	132	132	126		
1944	152	144	125	139	101	247	324	234	140	145	113		
1945	150	178	136	139	108	236	284	215	137	143	101		
1946	149	191	156	145	127	173	236	225	134	142	88		
1947	157	190	160	158	144	193	251	226	149	155	118		
1948	159	182	164	164	154	218	254	206	155	161	120		
March	158	191	164	166	150	211	250	205	142	146	118		
June	163	170	166	165	157	220	256	205	159	164	128		
September	163	189	168	166	154	207	257	205	156	162	119		
December	158	197	146	153	154	231	257	200	156	164	110		

Source: Board of Governors of the Federal Reserve System. Figures published monthly in Federal Reserve Bulletin.

## MANUFACTURES—SELECTED STATISTICS

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No. 1024.—MANUFACTURES—SELECTED STATISTICS, BY SIZE OF ESTABLISHMENT,  
FOR MAJOR INDUSTRY GROUPS: 1947

[Value figures in thousands of dollars. Employee figures are average for year]

MAJOR INDUSTRY GROUP AND ITEM	Total all establish- ments	ESTABLISHMENTS WITH AN AVERAGE OF—					
		1-9 em- ployees	10-49 em- ployees	50-99 em- ployees	100-499 employees	500-999 employees	1,000 and over
All industries, total:							
Number of establishments.....	240,881	117,005	80,662	18,672	19,878	2,729	1,935
All employees.....	14,294,304	471,887	1,808,842	1,300,719	4,160,981	1,883,494	4,671,411
Value added by manufacture.....	74,425,825	2,352,589	8,651,864	6,592,661	22,253,865	10,185,817	24,389,029
Food and kindred products:							
Number of establishments.....	39,933	20,121	14,040	2,934	2,515	216	107
All employees.....	1,441,847	83,456	300,226	205,485	486,450	143,044	214,186
Value added by manufacture.....	9,024,912	411,718	1,584,791	1,239,198	3,306,613	1,077,796	1,404,796
Tobacco manufactures:							
Number of establishments.....	1,086	604	202	85	147	27	21
All employees.....	111,782	1,897	4,763	6,054	35,639	17,943	45,486
Value added by manufacture.....	641,356	4,089	12,699	16,015	130,371	86,546	391,036
Textile mill products:							
Number of establishments.....	8,185	1,921	2,651	1,001	1,914	399	209
All employees.....	1,233,431	8,618	62,636	77,963	436,674	272,795	374,745
Value added by manufacture.....	5,340,876	66,062	279,580	313,168	1,813,278	1,148,973	1,729,815
Apparel and related products:							
Number of establishments.....	30,900	12,674	13,045	2,979	2,122	114	26
All employees.....	1,081,844	52,464	306,759	204,919	306,421	75,796	45,485
Value added by manufacture.....	4,443,373	359,392	1,359,094	800,235	1,401,012	275,689	187,351
Lumber and products, exc. furniture:							
Number of establishments.....	26,231	13,907	9,545	1,570	1,132	68	14
All employees.....	635,708	62,233	195,549	107,734	208,782	42,495	18,915
Value added by manufacture.....	2,497,102	192,537	634,602	422,479	927,486	209,432	110,666
Furniture and fixtures:							
Number of establishments.....	7,687	3,499	2,788	667	658	53	22
All employees.....	322,384	14,427	62,579	46,295	129,305	36,342	33,436
Value added by manufacture.....	1,377,908	58,810	251,378	197,195	550,183	170,432	149,910
Paper and allied products:							
Number of establishments.....	4,103	687	1,517	687	1,051	124	37
All employees.....	449,833	3,533	38,829	48,513	225,006	84,721	49,231
Value added by manufacture.....	2,874,958	16,999	106,071	302,770	1,521,553	562,275	275,290
Printing and publishing industries:							
Number of establishments.....	28,986	19,423	7,250	1,138	990	103	82
All employees.....	715,450	72,242	153,757	78,029	197,463	70,523	143,436
Value added by manufacture.....	4,260,416	353,725	820,454	445,266	1,177,352	457,752	1,014,877
Chemicals and allied products:							
Number of establishments.....	10,073	4,578	3,519	928	844	110	94
All employees.....	632,319	18,195	80,359	63,891	173,554	76,365	219,955
Value added by manufacture.....	5,365,201	127,044	650,811	522,019	1,618,357	707,678	1,679,292
Petroleum and coal products:							
Number of establishments.....	1,387	478	419	158	253	42	37
All employees.....	212,003	2,079	9,979	11,028	60,193	28,200	100,458
Value added by manufacture.....	2,015,307	18,652	108,525	135,106	614,224	252,454	886,316
Rubber products:							
Number of establishments.....	875	271	269	89	147	43	56
All employees.....	250,092	1,078	6,516	6,462	34,326	30,826	170,884
Value added by manufacture.....	1,302,863	4,749	29,848	28,454	172,195	147,200	920,357
Leather and leather products:							
Number of establishments.....	5,308	1,952	1,821	561	845	111	18
All employees.....	383,175	8,117	42,935	39,669	194,043	76,580	21,831
Value added by manufacture.....	1,532,803	90,333	173,246	153,606	738,052	304,337	73,229
Stone, clay, and glass products:							
Number of establishments.....	11,650	7,124	2,966	624	787	88	61
All employees.....	462,072	25,637	64,630	43,184	166,186	61,497	100,938
Value added by manufacture.....	2,306,480	96,290	292,646	197,921	871,428	324,224	523,971
Primary metal industries:							
Number of establishments.....	5,363	1,518	1,609	640	1,050	219	228
All employees.....	1,157,124	6,456	41,831	45,110	244,756	151,508	667,463
Value added by manufacture.....	5,765,434	30,570	191,961	217,572	1,373,312	815,260	3,136,769
Fabricated metal products:							
Number of establishments.....	16,734	7,774	5,653	1,384	1,553	254	116
All employees.....	971,461	31,259	129,091	90,867	326,801	172,427	215,016
Value added by manufacture.....	4,921,476	153,262	651,636	503,709	1,728,368	879,453	1,005,048
Machinery (except electrical):							
Number of establishments.....	17,906	8,432	5,825	1,341	1,098	322	290
All employees.....	1,545,323	33,883	128,657	93,629	370,448	226,148	692,558
Value added by manufacture.....	7,812,455	173,358	677,207	513,032	2,010,322	1,188,055	3,250,481
Electrical machinery:							
Number of establishments.....	3,973	1,281	1,206	448	698	178	162
All employees.....	801,359	5,375	28,589	31,698	166,102	133,091	436,444
Value added by manufacture.....	3,894,116	23,990	129,623	149,531	800,215	624,822	2,165,934

No. 1024.—MANUFACTURES—SELECTED STATISTICS, BY SIZE OF ESTABLISHMENT,  
FOR MAJOR INDUSTRY GROUPS: 1947—Continued

[Value figures in thousands of dollars. Employee figures are average for year]

MAJOR INDUSTRY GROUP AND ITEM	Total all establish- ments	ESTABLISHMENTS WITH AN AVERAGE OF—					
		1-9 em- ployees	10-49 em- ployees	50-99 em- ployees	100-499 employees	500-999 employees	1,000 and over
Transportation equipment:							
Number of establishments.....	3,711	1,466	1,070	307	464	146	256
All employees.....	1,181,680	5,780	25,208	21,484	102,774	103,692	922,742
Value added by manufacture.....	5,809,196	23,938	120,487	106,498	508,600	529,811	4,579,862
Instruments and related products:							
Number of establishments.....	2,599	1,270	795	195	249	40	50
All employees.....	231,997	4,690	17,604	13,440	53,586	20,236	113,441
Value added by manufacture.....	1,080,336	23,434	81,119	65,764	201,128	142,504	506,387
Miscellaneous manufactures:							
Number of establishments.....	14,131	8,025	4,382	846	754	77	47
All employees.....	464,420	30,468	96,345	59,265	152,412	50,169	75,761
Value added by manufacture.....	2,090,168	133,607	405,486	263,133	669,816	221,074	397,052

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

No. 1025.—MANUFACTURES—PRIME MOVERS, MOTORS, AND GENERATORS, BY NUMBER AND RATED CAPACITY: 1899 TO 1939

[See also *Historical Statistics*, series J 11-12 for horsepower of prime movers and electric motors driven by purchased energy]

KIND	1899	1909	1919	1929	1939
Number of establishments reporting power equipment.....	<sup>1</sup> 131,300	<sup>1</sup> 181,094	<sup>1</sup> 219,308	100,091	<sup>2</sup> 179,674
Prime movers, horsepower.....	<sup>3</sup> 9,638,215	<sup>4</sup> 16,303,467	19,432,157	10,328,309	21,239,195
Electric motors driven by purchased energy, horsepower.....	178,176	1,669,226	8,965,406	21,793,762	20,213,085
Prime movers:					
Steam engines:					
Number.....	<sup>5</sup> 127,145	<sup>5</sup> 148,001	110,609	62,395	42,538
Horsepower.....	<sup>5</sup> 7,999,241	<sup>5</sup> 13,806,053	13,346,169	9,157,756	6,533,429
Steam turbines:					
Number.....	( <sup>6</sup> )	( <sup>6</sup> )	5,655	8,883	12,631
Horsepower.....	( <sup>6</sup> )	( <sup>6</sup> )	3,098,698	7,409,748	11,295,872
Diesel and semi-Diesel engines:					
Number.....	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	5,311
Horsepower.....	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	630,181
Other internal-combustion engines:					
Number.....	<sup>6</sup> 14,231	<sup>6</sup> 33,866	<sup>6</sup> 30,080	<sup>6</sup> 10,901	10,278
Horsepower.....	<sup>6</sup> 132,961	<sup>6</sup> 739,736	<sup>6</sup> 1,223,296	<sup>6</sup> 1,203,303	1,176,044
Hydroturbines and water wheels:					
Number.....	<sup>7</sup> 23,078	<sup>7</sup> 21,226	<sup>7</sup> 13,952	6,511	3,854
Horsepower.....	<sup>7</sup> 1,453,821	<sup>7</sup> 1,819,465	<sup>7</sup> 1,763,994	1,557,503	1,603,669
Electric generators, kilowatt rating.....	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	7,591,999	9,658,828
Electric motors, total horsepower.....	475,342	4,582,680	15,612,644	33,844,131	45,291,319
Driven by purchased energy:					
Number.....	( <sup>6</sup> )	193,898	954,016	2,655,142	4,138,287
Horsepower.....	178,176	1,669,226	8,965,406	21,793,762	20,213,085
Driven by energy generated in plant:					
Number.....	16,317	180,791	465,519	829,959	1,224,478
Horsepower.....	297,166	2,913,463	6,047,238	12,050,369	16,078,234

<sup>1</sup> Because of change from \$500 to \$5,000 in minimum-value-of-products limit, "Number of establishments reporting power equipment" figures for 1919 and earlier years are not comparable with those for 1929 and 1939. This change did not, however, materially impair comparability of figures for other items in this table.

<sup>2</sup> Returns for "Logging camps and logging contractors (not operating mills)," numbering 987, were excluded from power tabulations.

<sup>3</sup> Includes 47,192 horsepower reported as other owned power, not distributed by type of prime mover.

<sup>4</sup> Includes 28,213 horsepower reported as other owned power, not distributed by type of prime mover.

<sup>5</sup> Figures for "Steam engines" include data for "Steam turbines," not reported separately.

<sup>6</sup> Figures for "Other internal-combustion engines" include data for "Diesel and semi-Diesel engines," not reported separately.

<sup>7</sup> Includes data for water motors.

<sup>8</sup> Not available.

Source: Department of Commerce, Bureau of the Census; 1939 Census of Manufactures reports, Vol.I.

**No. 1026.—INDUSTRIAL POWER REQUIREMENTS OF MANUFACTURING AND EXTRACTING INDUSTRIES: 1939 TO 1946**

[Based on reports filed by more than 5,000 manufacturing, industrial, and other establishments consuming over 85 percent of the total energy used by such establishments. Use for 1946 was estimated. Data have been adjusted to census coverage based on 1939 Census of Manufactures and 1939 Census of Mineral Industries]

[In millions of kilowatt-hours]

INDUSTRY	1939	1940	1941	1942	1943	1944	1945	1946
<b>Total</b>	<b>79,044</b>	<b>92,390</b>	<b>113,932</b>	<b>133,899</b>	<b>158,525</b>	<b>158,751</b>	<b>143,162</b>	<b>133,682</b>
<b>Manufacturing industries, total</b>	<b>70,518</b>	<b>82,661</b>	<b>103,109</b>	<b>120,844</b>	<b>143,963</b>	<b>144,319</b>	<b>129,183</b>	<b>120,280</b>
Food and kindred products	6,386	6,532	7,315	7,905	8,561	8,724	8,988	9,603
Tobacco manufactures	115	126	140	145	160	164	177	176
Textile-mill products	6,800	7,394	9,119	9,794	9,877	8,816	8,436	8,895
Apparel and other finished products	357	420	514	554	605	539	661	658
Lumber and timber basic products	1,245	1,424	1,582	1,636	1,630	1,462	1,464	1,601
Furniture and finished lumber products	605	679	830	845	886	867	882	977
Paper and allied products	9,097	10,006	11,185	11,270	10,985	11,038	11,445	12,154
Printing and publishing	859	930	1,025	1,042	1,075	1,101	1,161	1,213
Chemicals and allied products	9,747	12,602	16,397	21,671	28,684	29,163	24,590	21,565
Products of petroleum and coal	3,438	3,844	4,358	4,621	5,229	6,243	6,539	6,385
Rubber products	1,584	1,652	2,073	1,754	2,137	2,494	2,688	3,015
Leather and leather products	402	416	523	559	556	556	579	587
Stone, clay, and glass products	4,851	5,301	6,547	6,968	6,070	5,100	5,400	6,627
Iron and steel and their products	12,246	14,810	18,703	20,316	22,364	23,290	21,702	19,406
Nonferrous metals and their products	5,954	7,805	10,663	15,375	23,495	20,755	14,012	11,811
Electrical machinery	1,432	1,817	2,522	2,999	3,542	3,658	3,385	2,955
Machinery, except electrical	1,985	2,549	3,634	4,816	5,811	5,861	5,136	4,796
Automobiles and automobile equipment	2,467	3,042	3,668	3,454	4,572	4,662	4,274	4,245
Transportation equipment	462	796	1,648	4,277	7,281	8,909	6,418	2,782
Miscellaneous industries	466	516	663	793	933	917	852	830
<b>Government manufacturing industries, total</b>	<b>441</b>	<b>614</b>	<b>929</b>	<b>1,918</b>	<b>2,886</b>	<b>3,082</b>	<b>2,673</b>	<b>1,701</b>
Shipbuilding and ship repairing	180	250	414	735	986	1,155	1,108	957
Arsenal and ordnance products	90	183	319	809	1,109	1,100	828	267
Miscellaneous government products	171	231	196	374	791	827	739	477
<b>Extracting industries, total</b>	<b>8,085</b>	<b>9,115</b>	<b>9,894</b>	<b>11,137</b>	<b>11,676</b>	<b>11,350</b>	<b>11,306</b>	<b>11,701</b>
Metal mining	2,895	3,340	3,697	4,164	4,227	3,819	3,424	3,503
Coal mining	3,525	3,938	4,181	4,856	5,168	5,238	5,382	5,546
Nonmetallic mining and quarrying	828	939	1,131	1,230	1,346	1,348	1,501	1,646
Crude petroleum and natural gas production	837	898	885	887	935	945	998	1,000

Source: Federal Power Commission; annual report, Industrial Electric Power in the United States, 1939-1946. (Series discontinued.)

## MANUFACTURES

No. 1027.—MANUFACTURES—GENERAL STATISTICS, BY MAJOR INDUSTRY GROUPS: 1947 AND 1939

[Figures for 1939 adjusted for comparability with 1947. See general note, p. 924.]

INDUSTRY GROUP	1947				1939			
	All employees <sup>1</sup>		Production workers		Number of establishments	Number of production workers (average for the year)	Value added by manufacture (1,000) <sup>2</sup>	Value added by manufacturer (1,000) <sup>2</sup>
	Number of proprietors and firm members	Number (average for the year)	Salaries and wages, total (1,000)	Wages, total (1,000)				
All industries, total	240,881	188,948	14,294,304	\$39,689,527	11,916,188	\$30,242,343	\$74,425,825	\$24,486,856
Food and kindred products	39,933	31,430	1,441,947	3,759,387	1,099,478	2,572,190	9,024,912	802,133
Tobacco manufactures	1,086	874	111,782	2,836,383	1,477,166	2,446,312	6,310,356	87,525
Textile mill products	8,185	4,068	1,233,431	2,836,166	1,477,164	2,446,312	6,310,875	1,081,710
Apparel and related products	28,430	1,081,844	2,527,499	972,887	2,015,220	4,443,373	20,275	1,386,004
Lumber and products (except furniture)	29,272	635,708	1,327,612	596,118	1,170,981	2,497,192	13,208	731,208
Furniture and fixtures	6,112	322,384	824,061	282,750	653,915	1,377,908	189,382	417,785
Paper and allied products	4,103	1,289	446,883	1,280,672	388,901	1,010,972	2,874,958	3,328
Printing and publishing industries	28,986	22,885	715,450	2,277,263	438,215	1,318,285	24,878	324,270
Chemicals and allied products	10,034	632,319	1,910,433	466,488	1,242,028	5,305,201	275,869	888,350
Petroleum and coal products	1,387	398	212,003	739,345	169,610	556,365	2,015,307	1,227
Rubber products	875	366	259,092	783,464	614,762	1,302,865	595	120,740
Leather and leather products	5,308	3,496	358,775	873,566	725,143	1,632,803	3,505	327,189
Stone, clay, and glass products	11,650	10,223	462,072	1,210,765	405,675	994,884	2,306,480	6,678
Primary metal industries	5,383	1,238	1,157,124	3,594,548	1,010,055	2,976,507	5,765,434	3,512
Fabricated metal products	16,734	12,948	971,461	2,882,835	822,514	2,188,581	4,921,476	672,438
Machinery (except electrical)	17,906	13,159	1,545,323	4,804,563	1,244,155	3,592,771	7,812,455	8,860
Electrical machinery	3,973	1,727	801,359	2,271,039	639,147	1,641,401	3,894,115	536,082
Transportation equipment	3,711	2,834	1,181,080	3,719,553	987,152	2,939,815	5,869,196	247,930
Instruments and related products	2,599	1,861	231,997	665,347	181,939	467,785	1,030,336	2,012
Miscellaneous manufactures	14,131	11,849	464,420	1,205,508	397,579	920,508	2,090,168	1,292
							\$,084	84,887
								241,725
								628,984

<sup>1</sup> Includes all full-time and part-time production and related workers, clerical and routine office workers, administrative, supervisory, sales technical, and all other personnel on the pay rolls of manufacturing establishments. Excludes employees of central administrative offices operated by concerns having 2 or more manufacturing establishments. Wages and salaries represent the gross earnings of employees including commissions, dismissal day, nonproduction bonuses, vacation and sick leave pay, and compensation in kind, and prior to such deductions as employees' social security contributions, withholdings taxes, group insurance, union dues, and savings bonds.

<sup>2</sup> Value of products less cost of materials, supplies, fuel, electricity, and contract work.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

## MANUFACTURES BY INDUSTRY

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No. 1028.—MANUFACTURES—GENERAL STATISTICS, BY INDUSTRY: 1947 and 1939

[Figures for 1939 adjusted for comparability with 1947. See general note, p. 924]

INDUSTRY	1947					Number of production workers (average for the year), 1939	
	Number of establishments	All employees <sup>1</sup>		Production workers	Value added by manufacture (\$1,000) <sup>2</sup>		
		Number (average for the year)	Salaries and wages, total (\$1,000)	Number (average for the year)	Wages, total (\$1,000)		
<b>Food and kindred products</b>							
Meat products	39,933	1,441,847	3,789,387	1,099,478	2,572,190	9,024,912	
Meat packing, wholesale	3,974	274,441	781,940	220,732	584,566	1,280,692	
Prepared meats	2,163	208,309	622,770	167,072	468,743	976,895	
Poultry dressing, wholesale	1,214	44,379	122,742	34,473	86,570	235,537	
	557	21,693	30,428	19,187	29,253	68,160	
Dairy products	5,423	92,003	225,312	69,074	155,841	595,168	
Creamery butter	1,633	20,564	44,373	15,242	31,883	107,248	
Natural cheese	1,711	12,320	27,597	10,535	23,024	63,257	
Concentrated milk	428	16,035	42,870	13,982	34,838	148,771	
Ice cream and ices	1,521	35,807	92,000	23,196	52,222	228,049	
Special dairy products	130	7,367	18,472	6,119	13,874	47,843	
Canning, preserving, and freezing	3,826	201,027	418,000	181,004	339,224	916,621	
Canned sea food	254	20,163	37,207	18,929	31,755	96,807	
Cured fish	127	2,431	5,111	2,143	3,763	9,948	
Canning and preserving, exc. fish	2,205	135,974	288,443	121,916	234,886	600,939	
Dehydrated fruits and vegetables	146	3,976	8,145	3,662	6,834	18,155	
Pickles and sauces	743	21,730	48,221	18,584	36,153	122,395	
Frozen foods	201	17,363	31,542	15,770	25,833	59,377	
Grain-mill products	4,206	113,217	311,736	86,063	210,229	1,001,692	
Flour and meal	1,243	39,458	118,040	30,722	85,680	410,468	
Prepared animal feeds	2,689	55,347	143,301	40,266	93,579	394,236	
Cereal preparations	64	11,276	30,689	9,496	25,160	130,188	
Rice cleaning and polishing	88	4,072	9,999	3,267	6,700	43,432	
Blended and prepared flour	122	3,064	8,807	2,312	5,110	23,308	
Bakery products	7,123	279,368	765,202	187,581	429,487	1,365,809	
Bread and other bakery products	6,707	233,310	655,979	150,055	361,126	1,100,836	
Biscuit, crackers, and pretzels	326	46,058	109,223	37,526	78,361	246,073	
Sugar	181	35,423	91,291	30,749	75,520	233,869	
Raw cane sugar	82	4,635	8,550	4,022	6,597	17,709	
Cane-sugar refining	25	17,376	47,172	15,083	38,974	98,112	
Beet sugar	74	13,412	35,500	11,634	29,958	118,048	
Confectionery and related products	1,754	91,710	214,558	78,063	155,666	587,065	
Confectionery products	1,686	75,165	167,886	64,883	123,046	413,852	
Chocolate and cocoa products	31	9,605	27,480	7,708	19,174	98,276	
Chewing gum	37	6,940	19,192	5,472	13,446	74,937	
Beverages	6,755	202,574	508,654	138,515	375,021	1,860,914	
Bottled soft drinks	5,618	79,397	194,305	41,214	83,291	420,711	
Malt liquors	446	82,534	292,405	63,688	210,228	808,946	
Malt	53	2,524	9,550	2,060	6,896	53,885	
Wines and brandy	418	7,697	21,896	5,824	13,681	95,015	
Distilled liquors, except brandy	226	30,422	80,498	25,740	61,825	472,357	
Miscellaneous food preparations	6,601	150,794	382,025	107,697	239,727	1,193,082	
Leavening compounds	48	3,066	8,944	2,364	6,804	49,494	
Shortening and cooking oils	100	8,003	24,550	5,931	16,298	102,146	
Oleomargarine	27	2,567	8,337	1,806	5,279	43,750	
Corn products	55	12,324	41,115	10,158	32,088	127,143	
Flavorings	606	11,726	37,149	7,242	17,720	158,333	
Vinegar and cider	118	987	2,094	828	1,579	3,503	
Manufactured ice	3,432	46,462	103,038	29,048	63,026	226,584	
Macaroni and spaghetti	226	8,043	18,763	6,628	13,134	42,049	
Liquid, frozen, and dried eggs	154	9,800	16,570	8,700	13,284	32,209	
Food preparations, n. e. c.	1,025	47,816	121,465	34,992	69,915	350,871	
<b>Tobacco manufactures</b>	<b>1,086</b>	<b>111,782</b>	<b>205,838</b>	<b>103,289</b>	<b>175,318</b>	<b>641,356</b>	
Cigarettes	28	27,074	63,204	25,553	54,986	308,417	
Cigars	822	47,068	70,344	44,512	68,402	143,145	
Chewing and smoking tobacco	73	11,139	22,676	9,725	17,616	57,571	
Tobacco stemming and redrying	163	25,901	43,614	23,499	34,314	72,223	

For footnotes, see p. 943.

## No. 1028.—MANUFACTURES—GENERAL STATISTICS, BY INDUSTRY: 1947 AND 1939—Continued

INDUSTRY	1947				Number of production workers (average for the year), 1939	
	Number of establish-ments	All employees <sup>1</sup>		Production workers		
		Number (average for the year)	Salaries and wages, total (\$1,000)	Number (average for the year)	Wages, total (\$1,000)	
<b>Textile mill products</b>						
Woolen and worsted manufactures	8,185	1,233,431	2,836,166	1,147,194	2,449,312	5,340,876
Scouring and combing plants	828	180,054	457,055	166,947	394,655	803,592
Yarn mills, wool, except carpet	74	8,726	26,475	7,912	21,202	54,166
Woolen and worsted fabrics	200	33,178	75,380	31,463	66,443	127,808
Finishing wool textiles	495	132,348	338,928	122,432	293,962	509,534
	59	5,802	16,272	5,140	13,048	22,084
Yarn and thread mills, except wool	658	123,599	241,717	117,356	215,171	447,110
Yarn throwing mills	122	14,866	28,401	13,800	24,323	45,970
Thread mills	89	14,652	33,240	13,126	26,380	67,372
Yarn mills, cotton system	404	92,280	176,152	88,839	160,767	326,839
Yarn mills, silk system	43	1,801	3,924	1,501	3,151	6,929
Cotton and rayon broad woven fabrics	1,109	455,009	996,604	438,534	904,862	2,050,384
Cotton broad woven fabrics	602	357,361	764,532	342,360	699,871	1,562,336
Rayon and related broad woven fabrics	507	97,648	232,072	91,174	204,991	488,048
Narrow fabric mills	479	27,662	63,861	24,917	51,604	108,201
Knitting mills	3,126	230,527	492,718	212,962	414,036	854,596
Full-fashioned hosiery mills	738	70,034	178,062	65,148	150,320	310,369
Seamless hosiery mills	617	64,808	105,626	61,343	91,858	163,805
Knit outerwear mills	1,201	34,760	80,988	30,598	50,876	145,743
Knit underwear mills	172	40,579	80,520	37,546	67,990	134,399
Knit glove mills	46	5,212	9,222	4,965	8,203	14,730
Knit-fabric mills	308	14,158	36,087	12,502	28,051	72,272
Knitting mills, n. e. c.	44	976	2,213	872	1,738	4,278
Finishing textiles, except wool	641	77,985	218,933	69,035	170,094	359,270
Carpets and rugs	296	57,211	157,917	50,883	131,340	321,314
Wool carpets, rugs, and carpet yarn	95	40,096	111,558	85,560	92,656	217,046
Carpets and rugs, n. e. c.	182	7,055	14,378	6,444	11,556	30,086
Hard-surface floor coverings	19	10,060	31,981	8,879	27,128	83,282
Hats (except cloth and millinery)	271	21,428	55,159	18,864	43,362	92,040
Fur-felt hats and hat bodies	136	13,034	36,433	11,495	28,554	61,474
Wool-felt hats and hat bodies	49	4,467	9,304	3,067	7,564	13,038
Straw hats	40	2,438	5,387	2,057	4,113	8,610
Hatters' fur	46	1,489	3,945	1,345	3,131	8,018
Miscellaneous textile goods	777	59,956	152,202	52,606	118,188	294,369
Felt goods, n. e. c.	46	4,737	14,177	4,107	11,109	24,881
Lace goods	96	8,580	21,346	7,856	17,745	44,872
Paddlings and upholstery filling	138	8,243	21,296	7,378	17,018	44,444
Processed textile waste	179	5,805	12,804	5,149	9,822	22,612
Coated fabrics, except rubberized	110	8,698	27,596	6,048	19,219	51,209
Jute (exc. felt), and linen goods	35	5,290	12,140	4,815	9,942	21,318
Cordage and twine	148	15,950	36,228	14,122	28,490	71,999
Textile goods, n. e. c.	25	2,653	6,525	2,261	4,843	13,034
<b>Apparel and related products</b>	30,950	1,081,844	2,527,499	972,897	2,015,220	4,443,373
Men's and boys' suits and coats	1,989	150,369	404,799	136,136	337,972	674,243
Men's and boys' suits and coats	1,816	146,768	396,244	132,866	331,151	658,358
Suit and coat findings	153	3,601	8,555	3,270	6,821	15,855
Men's and boys' furnishings	4,026	253,436	456,321	234,476	374,850	803,911
Men's dress shirts and nightwear	1,065	94,308	163,945	85,172	137,653	292,714
Men's and boys' underwear	103	7,269	11,330	6,929	9,847	20,348
Men's and boys' neckwear	413	10,744	25,367	9,246	18,485	50,708
Men's and boys' cloth hats and caps	313	5,541	12,379	5,063	10,455	20,685
Hat and cap materials	70	1,111	3,002	943	2,100	5,620
Separate trousers	976	48,300	93,639	44,939	77,370	163,731
Work shirts	85	12,061	16,609	11,169	13,858	33,212
Men's and boys' clothing, n. e. c.	1,001	74,102	130,050	68,015	105,082	210,893

For footnotes, see p. 943.

## MANUFACTURES BY INDUSTRY

No. 1028.—MANUFACTURES—GENERAL STATISTICS, BY INDUSTRY: 1947 AND 1939—  
Continued

INDUSTRY	1947					Number of pro- duction workers (average for the year), 1939	
	Number of estab- lish- ments	All employees <sup>1</sup>		Production workers			
		Number (average for the year)	Salaries and wages, total (\$1,000)	Number (average for the year)	Wages, total (\$1,000)		
<b>Apparel, etc.—Con.</b>							
Women's and misses' outerwear	10,085	313,402	846,340	279,029	671,342	1,427,801	
Blouses and waists	1,361	32,787	67,473	29,946	54,166	123,640	
Dresses, unit price	4,202	133,294	370,854	118,276	294,847	609,576	
Dresses, dozen price	917	48,692	90,494	43,867	68,658	153,052	
Women's suits and coats	2,477	74,306	261,425	65,397	211,245	438,145	
Women's skirts	493	8,312	21,270	7,434	16,841	38,484	
Women's neckwear and scarfs	166	2,754	6,963	2,181	3,829	16,850	
Women's outerwear, n. e. c.	469	13,287	27,861	11,928	21,756	48,144	
Women's and children's undergarments	2,051	94,568	197,898	83,895	145,208	387,974	
Women's and children's underwear	1,516	57,306	114,543	51,997	86,181	227,236	
Corsets and allied garments	535	37,252	83,355	31,898	59,027	160,738	
Millinery	932	20,893	50,489	18,070	46,812	100,723	
Children's outerwear	1,087	48,136	101,162	43,358	79,351	178,265	
Children's dresses	664	22,435	43,416	20,347	33,975	76,469	
Children's coats	506	12,427	33,229	10,990	25,899	58,365	
Children's outerwear, n. e. c.	517	13,274	24,517	12,021	10,477	43,431	
Fur goods	2,220	16,190	68,571	13,745	57,636	122,821	
Misc. apparel and accessories	1,727	57,229	119,519	50,972	91,548	215,019	
Fabric and combination dress gloves	130	5,136	8,378	4,769	6,908	13,256	
Fabric and combination work gloves	144	10,981	17,979	10,421	15,903	35,005	
Suspenders and garters	64	1,085	3,041	1,408	2,417	6,774	
Robes and dressing gowns	376	10,884	23,353	9,803	17,630	42,563	
Waterproof outer garments	247	8,283	19,561	7,330	14,991	31,975	
Leather and sheep-lined clothing	126	4,335	10,078	3,816	8,041	18,798	
Belts	396	9,162	22,016	7,573	15,889	38,037	
Handkerchiefs	150	4,583	9,054	4,078	6,303	20,089	
Apparel, n. e. c.	85	2,180	4,859	1,765	3,316	7,922	
Misc. fabricated textiles	6,254	127,631	273,400	113,210	210,501	532,526	
Curtains and draperies	397	7,982	17,081	6,928	11,702	34,909	
Housefurnishings, n.e.c.	1,233	40,220	78,790	30,384	63,053	156,420	
Textile bags	233	13,884	28,303	12,189	21,046	66,320	
Canvas products	902	10,569	24,667	8,039	17,429	41,424	
Tucking, pleating, and hemstitching	531	5,929	12,421	5,532	11,035	21,330	
Trimmings and art goods	787	15,607	33,024	13,120	25,547	65,092	
Schiffli-machine embroideries	546	5,678	15,054	5,080	11,681	31,733	
Embroideries, except Schiffli-machine	787	9,836	20,234	9,308	17,627	34,521	
Fabricated textile products, n.e.c.	838	18,526	42,866	16,060	31,381	80,768	
<b>Lumber and products (except furniture)</b>							
Lumber and timber basic products	26,231	635,708	1,337,612	596,118	1,179,981	2,497,192	
Sawmills and planing mills, general	19,085	406,815	797,151	388,665	728,645	1,560,476	
Veneer mills	19,223	382,902	753,878	366,119	601,094	1,401,932	
Cooperage stock mills	156	10,461	20,441	9,722	17,248	36,858	
Excelsior mills	250	12,291	20,253	11,739	17,984	27,191	
256	1,161	2,579	1,085	2,319	4,495	925	
Millwork and related products	2,681	94,275	255,366	83,214	207,733	442,746	
Millwork plants	2,312	57,599	156,073	50,288	126,014	256,389	
Plywood plants	162	26,499	71,026	24,448	61,977	146,087	
Prefabricated wood products	207	10,177	28,267	8,478	20,742	40,260	
Wooden containers	1,516	69,104	139,553	64,727	121,257	233,453	
Fruit and vegetable baskets	141	9,105	13,398	8,781	12,093	19,330	
Rattan and willow ware, n.e.c.	53	1,073	2,101	983	1,776	3,573	
Cigar boxes	42	1,875	3,135	1,747	2,650	4,655	
Wooden boxes (except cigar boxes)	1,025	47,828	98,833	44,606	85,757	174,545	
Cooperage	255	9,223	22,086	8,610	18,981	31,350	

For footnotes, see p. 943.

## No. 1028.—MANUFACTURES—GENERAL STATISTICS, BY INDUSTRY: 1947 AND 1939—Continued

INDUSTRY	1947					Number of pro- duction workers (average for the year), 1939	
	Num- ber of estab- lish- ments	All employees <sup>1</sup>		Production workers			
		Number (average for the year)	Salaries and wages, total (\$1,000)	Number (average for the year)	Wages, total (\$1,000)		
<b>Lumber, etc.—Con.</b>							
Miscellaneous wood products	2,340	65,514	145,542	59,512	122,346	260,517	
Wood preserving	242	16,247	37,142	14,772	32,020	92,041	
Lasts and related products	50	1,959	5,348	1,690	4,159	8,937	
Mirror and picture frames	246	3,811	10,255	3,293	7,742	15,506	
Wood products, n. e. c.	1,811	43,497	92,797	39,748	78,425	144,033	
<b>Furniture and fixtures</b>	<b>7,687</b>	<b>322,384</b>	<b>824,061</b>	<b>282,780</b>	<b>653,915</b>	<b>1,377,908</b>	
Household furniture	4,880	228,946	559,025	204,020	450,772	933,407	
Wood house furniture, except upholstered	2,251	132,709	306,371	120,661	254,595	402,738	
Household furniture upholstered	1,391	44,755	114,861	39,786	92,908	192,430	
Reed and rattan furniture	29	771	1,919	686	1,521	3,697	
Metal house furniture, except upholstered	300	19,455	51,634	16,654	30,369	94,511	
Mattresses and bedsprings	879	30,344	82,102	25,460	66,824	146,050	
Household furniture, n. e. c.	21	882	2,138	773	1,555	4,041	
Office furniture	218	21,292	59,834	17,984	47,128	107,711	
Wood office furniture	115	6,601	17,211	5,897	14,152	26,830	
Metal office furniture	103	14,601	42,623	12,087	32,976	80,872	
Public and professional furniture	105	14,410	41,151	11,916	30,500	65,098	
Public building furniture	118	8,855	24,710	7,402	18,716	37,632	
Professional furniture	77	5,555	16,441	4,514	11,784	27,406	
Partitions and fixtures	1,134	27,678	88,632	23,783	69,953	130,843	
Screens, shades, and blinds	1,058	25,973	64,237	21,541	46,606	116,300	
Window and door screens	284	9,510	26,205	7,766	17,894	44,416	
Window shades	126	6,760	18,668	5,495	13,264	34,844	
Venetian blinds	648	9,703	20,364	8,280	16,448	37,130	
Miscellaneous furniture and fixtures	202	4,085	11,182	3,536	8,956	18,303	
Restaurant furniture	173	8,370	9,161	2,880	7,273	15,201	
Furniture and fixtures, n. e. c.	29	715	2,021	656	1,683	3,192	
<b>Paper and allied products</b>	<b>4,103</b>	<b>449,833</b>	<b>1,280,672</b>	<b>388,901</b>	<b>1,010,972</b>	<b>2,874,958</b>	
Pulp, paper, and paperboard	891	198,370	609,270	174,096	509,023	1,486,046	
Pulp mills	226	50,290	148,125	45,412	127,452	415,938	
Paper and board mills	665	148,080	461,145	128,684	381,571	1,050,108	
Paper coating and glazing	182	18,133	56,832	15,194	43,190	126,840	
Envelopes	164	13,797	39,191	11,543	27,656	68,253	
Paper bags	193	22,265	53,860	19,558	42,318	119,205	
Paperboard containers and boxes	1,652	119,131	316,136	102,861	236,020	670,127	
Paperboard boxes	1,522	109,776	292,948	94,625	217,154	633,269	
Fiber cans, tubes, drums, etc.	130	9,355	23,188	8,236	18,866	36,888	
Pulp goods and misc. paper products	1,021	78,137	205,383	65,640	152,765	424,427	
Die-cut paper and board	205	8,488	23,200	7,032	17,039	46,955	
Wallpaper	58	5,462	16,287	4,771	12,222	32,732	
Pulp goods, pressed and molded	19	1,748	4,910	1,482	3,870	9,672	
Converted paper products, n. e. c.	739	62,439	160,986	52,364	119,634	335,068	
<b>Printing and publishing industries</b>	<b>28,986</b>	<b>715,450</b>	<b>2,277,263</b>	<b>438,135</b>	<b>1,318,285</b>	<b>4,269,416</b>	
Newspapers	8,339	234,375	743,854	118,116	372,752	1,398,724	
Periodicals	2,166	68,823	235,508	19,346	64,314	604,632	
Books	804	50,900	143,114	17,372	49,844	320,562	
Books: publishing and printing	648	39,942	104,278	8,092	20,142	262,903	
Book printing	156	10,958	38,836	9,280	29,702	57,059	
Miscellaneous publishing	611	12,036	35,200	3,430	8,475	72,151	
Commercial printing	11,932	193,415	598,702	155,987	453,516	977,686	
Lithographing	1,413	52,240	192,178	41,247	126,872	313,402	
Greeting cards	162	18,053	43,898	12,650	23,900	81,051	

For footnotes, see p. 943.

## No. 1028.—MANUFACTURES—GENERAL STATISTICS, BY INDUSTRY: 1947 AND 1939—Continued

INDUSTRY	1947					Number of production workers (average for the year), 1939	
	Number of establish- ments	All employees <sup>1</sup>		Production workers			
		Number (average for the year)	Salaries and wages, total (\$1,000)	Number (average for the year)	Wages, total (\$1,000)		
Printing and publishing industries—Continued.							
Bookbinding and related industries	1,342	42,561	107,466	36,437	84,632	177,144	
Bookbinding	686	22,227	57,541	20,037	48,837	90,259	
Blankbook making and paper ruling	305	8,768	21,028	7,030	14,654	36,622	
Loose-leaf binders and devices	131	8,133	20,946	6,445	14,914	36,797	
Miscellaneous bookbinding work	220	3,433	7,951	2,916	6,207	13,466	
Printing trades service industries	2,217	43,047	177,343	33,550	133,980	264,004	
Typesetting	794	11,475	44,906	9,801	35,409	60,342	
Engraving and plate printing	416	7,688	20,998	6,463	16,959	33,094	
Photoengraving	770	10,711	80,003	12,234	57,962	116,131	
Electrotyping and stereotyping	237	7,173	31,436	5,552	23,650	47,937	
Chemicals and allied products	10,073	632,319	1,910,463	466,458	1,242,628	5,355,201	
Industrial inorganic chemicals	412	65,347	204,113	50,203	146,900	454,699	
Alkalies and chlorine	32	19,853	63,822	15,017	45,494	113,868	
Inorganic chemicals, n. e. c.	380	45,494	140,291	35,186	101,466	340,831	
Industrial organic chemicals	503	206,295	648,618	157,905	458,663	1,551,381	
Cyclic (coal-tar) crudes	46	1,972	5,490	1,633	4,527	17,071	
Plastics materials	125	29,337	93,410	22,212	64,306	200,341	
Synthetic rubber	20	7,663	25,774	5,721	18,381	97,356	
Synthetic fibers	38	71,882	199,910	57,857	150,380	447,877	
Explosives	76	10,426	32,313	8,932	26,051	74,706	
Organic chemicals, n. e. c.	258	85,015	291,721	61,550	195,018	714,030	
Drugs and medicines	1,355	81,803	236,912	54,725	133,324	748,570	
Biological products	85	3,154	8,831	2,244	5,119	19,941	
Botanical products	15	709	2,042	506	1,245	9,009	
Medicinal chemicals	92	12,388	40,178	9,414	28,032	110,516	
Pharmaceutical preparations	1,163	65,552	185,861	42,561	98,928	609,104	
Soap and related products	1,392	44,962	149,753	29,729	82,042	606,079	
Soap and glycerin	249	27,060	93,638	19,394	57,619	450,721	
Cleaning and polishing preparations	1,038	15,352	48,200	9,000	20,984	135,120	
Sulfonated oils and assistants	105	1,950	7,906	1,245	3,439	20,238	
Paints and allied products	1,456	67,807	224,840	45,822	124,936	573,237	
Paints and varnishes	1,291	53,412	150,952	34,603	94,155	409,584	
Inorganic color pigments	94	13,140	39,747	10,310	28,731	94,658	
Whiting and fillers	71	1,255	4,141	819	2,050	8,995	
Gum and wood chemicals	118	8,466	20,552	7,382	10,347	62,965	
Hardwood distillation	27	1,872	4,140	1,618	3,313	7,490	
Softwood distillation	32	4,574	11,815	4,071	9,655	46,064	
Gum naval stores (steam distilled)	31	638	1,385	512	947	2,634	
Natural tanning and dyeing materials	28	1,382	3,212	1,181	2,432	6,777	
Fertilizers	704	31,933	71,607	26,574	52,758	186,601	
Fertilizers	187	20,371	48,000	17,373	37,300	120,856	
Fertilizers (mixing only)	517	11,562	23,607	9,201	15,449	59,745	
Vegetable and animal oils	1,194	43,431	117,307	35,887	86,054	482,476	
Cottonseed oil mills	315	14,398	31,419	12,136	22,560	104,603	
Linseed oil mills	17	1,577	4,536	1,349	3,628	42,243	
Soybean oil mills	133	0,460	18,773	5,076	13,488	105,291	
Vegetable oil mills, n. e. c.	84	5,036	13,356	4,202	9,873	77,500	
Marine animal oils	59	1,947	5,046	1,792	4,341	15,033	
Grease and tallow	556	12,472	38,969	10,060	28,722	118,830	
Fatty acids	16	1,335	4,433	1,037	3,055	17,151	
Animal oils, n. e. c.	14	206	775	139	386	522	

For footnotes, see p. 943.

## No. 1028.—MANUFACTURES—GENERAL STATISTICS, BY INDUSTRY: 1947 AND 1939—Continued

INDUSTRY	1947					Number of pro- duction workers (average for the year), 1939	
	Number of estab- lish- ments	All employees 1		Production workers			
		Number (average for the year)	Salaries and wages, total (\$1,000)	Number (average for the year)	Wages, total (\$1,000)		
<b>Chemicals, etc.—Con.</b>							
Miscellaneous chemical products	2,879	82,275	236,761	58,231	141,544	699,193	
Printing ink	239	6,021	20,496	4,164	11,890	51,940	
Essential oils	42	1,151	3,787	806	2,510	14,477	
Toilet preparations	718	26,023	65,580	18,186	36,097	226,872	
Glue and gelatin	72	5,372	17,133	4,317	12,472	45,346	
Carbon black	59	3,184	10,017	2,834	8,456	44,002	
Compressed and liquefied gases	371	8,983	25,241	6,139	16,996	66,833	
Insecticides and fungicides	166	4,579	13,452	3,216	7,997	30,121	
Salt	38	4,809	12,762	4,056	9,826	25,197	
Chemical products, n. e. c.	1,174	22,153	68,293	14,433	34,700	103,436	
<b>Petroleum and coal products</b>	<b>1,387</b>	<b>212,003</b>	<b>739,345</b>	<b>169,610</b>	<b>556,365</b>	<b>2,015,307</b>	
Petroleum refining	437	145,806	535,781	113,847	396,236	1,404,474	
Coke and byproducts	167	38,938	119,996	34,416	101,012	278,230	
Beehive coke ovens	78	3,100	10,251	2,935	9,507	21,601	
Byproduct coke ovens	39	35,838	109,745	31,481	91,415	250,500	
Paving and roofing materials	437	19,263	58,048	15,770	44,001	155,655	
Paving mixtures and blocks	263	2,684	8,268	1,900	5,486	22,803	
Roofing felts and coatings	174	16,579	49,780	13,819	38,515	132,852	
Misc. petroleum and coal products	346	7,906	25,520	5,568	15,116	86,948	
Fuel briquets and packaged fuel	99	1,204	3,467	1,042	2,988	9,003	
Lubricants, n. e. c.	233	6,271	20,643	4,091	11,022	69,435	
Petroleum and coal prod., n. e. c.	14	521	1,410	455	1,108	8,420	
<b>Rubber products</b>	<b>875</b>	<b>259,092</b>	<b>783,464</b>	<b>214,533</b>	<b>614,762</b>	<b>1,302,863</b>	
Tires and inner tubes	57	115,657	390,841	93,916	311,276	650,165	
Rubber footwear	26	28,125	72,666	23,952	55,402	121,040	
Reclaimed rubber	15	2,070	6,849	1,855	5,826	9,004	
Rubber industries, n. e. c.	777	113,240	313,108	94,810	230,198	522,054	
<b>Leather and leather products</b>	<b>5,308</b>	<b>383,175</b>	<b>873,566</b>	<b>348,529</b>	<b>725,143</b>	<b>1,532,803</b>	
Leather tanning and finishing	561	53,205	166,540	48,627	130,586	403,783	
Industrial leather belting	183	5,032	13,441	4,015	9,667	28,375	
Footwear cut stock	606	22,077	47,703	19,706	38,468	87,301	
Footwear (except rubber)	1,500	240,315	516,879	220,654	438,804	785,543	
Footwear, except rubber	1,288	229,303	494,319	210,634	420,610	745,905	
House slippers	212	11,012	22,560	10,020	18,384	39,548	
Leather gloves and mittens	341	11,544	20,710	10,464	17,040	31,911	
Leather dress gloves	252	8,968	15,844	8,151	13,141	24,042	
Leather work gloves	89	2,576	4,866	2,313	3,800	7,860	
Luggage	592	16,066	41,298	13,904	31,141	68,078	
Handbags and small leather goods	980	25,907	57,011	23,246	44,122	96,076	
Handbags and purses	734	20,301	45,409	18,404	35,092	76,586	
Small leather goods	246	5,606	11,602	4,842	8,130	19,490	
Miscellaneous leather goods	545	9,029	19,899	7,913	15,225	31,736	
Saddlery, harness, and whips	140	2,861	6,294	2,501	5,021	9,437	
Leather goods, n. e. c.	405	6,188	13,605	5,412	10,204	22,290	
<b>Stone, clay, and glass products</b>	<b>11,650</b>	<b>462,072</b>	<b>1,210,768</b>	<b>405,755</b>	<b>994,884</b>	<b>2,306,480</b>	
Flat glass	84	27,241	84,067	24,325	73,252	173,754	
Pressed and blown glassware	213	89,302	230,287	70,417	193,954	421,518	
Glass containers	87	47,132	126,503	41,943	107,101	252,060	
Pressed and blown glassware, n. e. c.	126	42,170	103,784	37,474	86,853	169,440	
Products of purchased glass	1,054	22,357	56,644	19,298	43,739	118,107	
Cement, hydraulic	155	35,662	98,626	30,639	79,861	247,936	
Structural clay products	1,110	69,273	169,779	62,689	144,040	280,392	
Brick and hollow tile	674	29,617	69,399	27,002	59,376	110,867	
Floor and wall tile	37	6,828	16,335	6,250	13,774	31,238	
Sewer pipe	69	9,105	22,421	8,310	19,552	39,302	
Clay refractories	169	17,978	47,074	18,950	38,084	76,064	
Structural clay products, n. e. c.	161	5,745	13,950	5,177	12,154	23,871	

For footnotes, see p. 943.

## MANUFACTURES BY INDUSTRY

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No. 1028.—MANUFACTURES—GENERAL STATISTICS, BY INDUSTRY: 1947 AND 1939—Continued

INDUSTRY	1947					Number of production workers (average for the year), 1939	
	All employees <sup>1</sup>		Production workers		Value added by manufacture (\$1,000) <sup>2</sup>		
	Number of establishments	Number (average for the year)	Salaries and wages, total (\$1,000)	Number (average for the year)	Wages, total (\$1,000)		
<b>Stone, clay, etc.—Continued</b>							
Pottery and related products	742	58,006	140,962	53,376	126,677	224,792	
Vitreous plumbing fixtures	33	7,831	24,615	6,996	21,187	45,677	
Vitreous-china food utensils	27	11,100	26,849	10,326	23,530	35,228	
Earthenware food utensils	76	16,747	42,091	15,742	37,175	54,837	
Porcelain electrical supplies	50	11,547	30,463	10,447	25,454	52,832	
China decorating for the trade	65	1,048	2,471	875	1,079	5,143	
Pottery products, n. e. c.	491	9,733	20,473	8,990	17,652	31,075	
<b>Concrete and plaster products</b>	6,494	70,176	169,559	61,572	140,032	346,761	
Concrete products	6,158	46,821	106,484	41,537	88,471	202,789	
Gypsum products	73	7,472	21,384	6,543	17,911	67,879	
Lime	172	7,000	18,767	6,129	15,616	39,253	
Mineral wool	91	8,874	22,924	7,363	18,134	36,840	
Cut-stone and stone products	640	9,880	25,922	8,312	20,605	45,940	
<b>Misc. nonmetallic mineral products</b>	1,208	80,175	229,522	66,127	172,724	447,280	
Abrasive products	253	20,754	66,158	15,864	45,031	126,659	
Asbestos products	111	21,463	60,119	18,140	47,429	112,571	
Gaskets and asbestos insulations	191	12,960	36,047	10,743	27,038	65,303	
Graphite: ground or blended	12	858	2,799	618	1,625	4,948	
Minerals: ground or treated	206	7,955	21,328	6,720	16,798	51,058	
Sand-lime products	26	303	746	250	501	1,186	
Nonclay refractories	63	10,273	27,783	8,951	22,963	58,022	
Statuary and art goods	272	2,025	4,268	1,829	3,534	7,391	
Nometallic mineral products, n. o. c.	74	3,589	10,274	3,003	7,715	20,145	
<b>Primary metal industries</b>	5,363	1,157,124	3,594,548	1,010,055	2,976,507	5,765,434	
Blast furnaces and steel mills	320	547,364	1,735,111	478,960	1,454,985	391,215	
Blast furnaces	86	36,937	112,018	32,697	93,598	328,060	
Steel works and rolling mills	215	500,799	1,593,808	438,088	1,337,938	2,275,697	
Electrometallurgical products	19	9,628	20,285	8,175	23,449	55,493	
Iron and steel foundries	1,936	267,306	793,455	230,272	672,116	1,121,522	
Gray-iron foundries	1,654	173,776	512,177	157,361	441,657	732,647	
Malleable-iron foundries	78	29,802	90,811	26,659	76,750	121,661	
Steel foundries	204	63,668	190,497	56,252	153,709	267,214	
<b>Primary nonferrous metals</b>	88	42,804	127,026	37,396	107,201	325,643	
Primary copper	27	14,629	44,790	13,065	38,967	134,658	
Primary lead	16	4,663	14,082	4,022	11,610	35,902	
Primary zinc	20	12,424	35,476	11,088	30,475	77,008	
Primary aluminum	11	8,919	26,398	7,336	20,930	65,262	
Primary nonferrous metals, n. e. c.	14	2,169	6,280	1,885	5,309	12,753	
Secondary nonferrous metals	322	18,402	56,576	14,750	39,046	119,667	
<b>Nonferrous metal rolling and drawing</b>	162	88,824	264,117	74,796	209,657	503,363	
Copper rolling and drawing	78	53,867	166,076	45,924	133,969	302,592	
Aluminum rolling and drawing	29	27,365	73,605	22,786	57,544	150,897	
Nonferrous metal rolling, n. e. c.	55	7,592	24,376	6,036	18,144	50,074	
Nonferrous foundries	1,724	65,342	198,988	57,469	163,706	295,884	
<b>Misc. primary metal industries</b>	811	127,082	419,245	107,412	320,706	740,155	
Iron and steel forgings	250	36,724	128,198	32,384	105,776	197,111	
Wire drawing	134	55,079	175,682	45,644	136,797	314,788	
Welded and heavy-riveted pipe	50	13,144	43,115	11,306	34,348	89,614	
Primary metal industries, n. e. c.	377	22,135	72,250	18,078	52,785	138,642	
<b>Fabricated metal products</b>	16,734	971,461	2,832,835	822,514	2,188,581	4,921,476	
Tin cans and other tinware	217	46,890	127,338	40,890	105,689	231,953	
Cutlery, hand tools, and hardware	1,806	154,168	422,726	131,604	339,163	728,426	
Cutlery	195	20,248	54,142	17,579	42,630	104,833	
Edge tools	238	8,828	24,681	7,632	19,486	40,472	
Hand tools, n. e. c.	679	35,668	103,191	30,138	79,061	174,540	
Files	37	4,446	11,213	4,084	9,714	19,149	
Hand saws and saw blades	89	8,441	25,600	7,380	20,872	42,975	
Hardware, n. e. c.	728	70,537	213,899	64,791	167,500	346,457	

For footnotes, see p. 943.

## No. 1028.—MANUFACTURES—GENERAL STATISTICS, BY INDUSTRY: 1947 AND 1939—Continued

INDUSTRY	1947					Number of pro- duction workers (average for the year), 1939 <sup>a</sup>	
	Num- ber of estab- lish- ments	All employees <sup>1</sup>		Production workers			
		Number (average for the year)	Salaries and wages, total (\$1,000)	Number (average for the year)	Wages, total (\$1,000)		
Fabricated metal products— Continued							
Heating and plumbing equipment.	1,276	150,882	430,102	126,725	330,020	78,330	
Metal plumbing fixtures and fittings.	277	34,080	96,371	30,107	80,144	155,944	
Oil burners.	151	6,318	19,880	4,646	12,760	44,388	
Heating and cooking apparatus, n. c. c.	848	110,475	322,842	91,972	246,126	58,102	
Structural metal products.	4,507	212,370	661,090	172,690	486,737	1,143,553	
Structural and ornamental products.	1,067	70,678	240,034	64,278	180,105	440,701	
Metal doors, sash, and trim.	320	21,079	66,038	17,350	49,238	117,642	
Boiler shop products.	812	68,979	213,364	55,937	157,404	358,764	
Sheet-metal work.	1,708	42,643	132,663	35,116	90,930	226,446	
Metal stamping and coating.	4,437	182,983	521,331	150,926	414,874	801,173	
Vitreous-enamelled products.	49	12,240	28,070	11,061	22,917	45,116	
Metal stampings.	1,081	132,011	388,038	113,976	304,120	642,483	
Enameling and lacquering.	261	4,025	10,188	3,653	8,053	16,638	
Galvanizing.	125	3,056	8,036	2,711	6,548	15,290	
Engraving on metal.	219	3,428	10,054	2,929	8,176	16,252	
Plating and polishing.	1,802	28,223	76,345	25,596	64,460	125,388	
Lighting fixtures.	1,206	47,506	132,858	30,883	97,351	247,610	
Fabricated wire products.	977	60,647	171,294	52,543	130,195	282,147	
Nails and spikes.	68	3,805	9,876	3,278	7,738	15,721	
Wirework, n. e. c.	909	56,842	161,418	49,265	128,457	266,426	
Misc. fabricated metal products.	2,248	115,916	347,087	68,253	260,543	637,081	
Metal barrels, drums, and pails.	70	10,915	31,331	9,320	24,918	64,110	
Safes and vaults.	26	3,754	10,117	3,004	7,437	10,434	
Steel springs.	81	7,760	24,038	6,747	20,233	45,876	
Bolts, nuts, washers, and rivets.	364	49,235	151,514	40,908	115,790	285,461	
Screw-machine products.	1,207	28,492	86,850	24,740	68,949	143,853	
Collapsible tubes.	19	3,866	9,415	3,475	7,205	16,942	
Metal foil.	43	4,261	11,732	3,673	9,252	21,430	
Fabricated metal products, n.e.c.	438	7,633	21,190	6,377	15,750	39,967	
Machinery (except electrical).	17,906	1,545,323	4,804,563	1,244,135	3,692,771	7,812,465	
Engines and turbines.	161	93,064	208,789	71,826	218,538	408,090	
Steam engines and turbines.	17	21,640	71,072	15,375	49,584	80,947	
Internal-combustion engines.	134	71,424	226,817	50,451	168,954	327,152	
Tractors and farm machinery.	1,102	171,435	494,625	130,620	381,574	753,702	
Tractors.	94	77,317	227,707	62,026	177,966	332,062	
Farm machinery (exc. tractors).	1,008	94,118	266,858	70,703	203,608	421,700	
Construction and mining machinery.	747	113,871	355,307	88,005	255,047	641,307	
Construction and mining machinery.	517	84,604	263,835	66,106	180,064	470,132	
Oil-field machinery and tools.	230	20,177	91,632	22,709	65,083	171,205	
Metalworking machinery.	4,203	214,543	728,840	172,082	541,586	1,131,182	
Machine tools.	316	70,657	235,038	54,892	160,206	347,965	
Metalworking machinery, n. e. c.	428	54,088	182,038	43,508	132,810	302,842	
Cutting tools, jigs, fixtures, etc.	3,549	88,808	310,834	74,622	242,570	480,375	
Special-industry machinery, n. e. c.	4,100	215,967	685,776	173,592	512,363	1,095,558	
Food-products machinery.	622	36,839	113,506	28,820	82,062	191,214	
Textile machinery.	489	53,583	158,446	45,303	126,142	256,436	
Woodworking machinery.	294	15,642	48,707	12,623	35,332	86,360	
Paper-industries machinery.	149	17,088	57,749	13,308	41,523	81,358	
Printing-trades machinery.	326	24,752	84,333	10,584	62,616	131,625	
Special-industry machinery, n. e. c.	2,220	68,063	223,035	53,768	164,088	348,565	

For footnotes, see p. 943.

## MANUFACTURES BY INDUSTRY

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No. 1028.—MANUFACTURES—GENERAL STATISTICS, BY INDUSTRY: 1947 AND 1930—Continued

INDUSTRY	1947					Number of production workers (average for the year), 1939	
	Number of establishments	All employees <sup>1</sup>		Production workers			
		Number (average for the year)	Salaries and wages, total (\$1,000)	Number (average for the year)	Wages, total (\$1,000)		
<b>Machinery, etc.—Continued</b>							
General industrial machinery	2,191	217,402	690,443	164,249	472,472	1,189,229	
Pumps and compressors	447	54,726	167,498	40,358	115,404	282,476	
Elevators and escalators	111	10,227	33,998	7,317	22,890	68,614	
Conveyors	253	24,578	84,084	18,073	55,024	143,515	
Blowers and fans	192	14,794	44,202	11,087	30,329	84,429	
Industrial trucks and tractors	197	13,974	42,038	10,652	29,600	81,789	
Power-transmission equipment	416	54,316	173,596	43,975	124,941	283,647	
Industrial furnaces and ovens	108	6,341	21,719	4,045	11,872	38,990	
Mechanical stokers	46	4,111	12,371	3,118	8,886	22,212	
General industrial machinery, n. e. c.	421	34,335	110,937	25,624	73,466	183,557	
Office and store machines	357	97,778	303,123	84,340	247,458	503,854	
Computing and related machines	53	46,375	154,716	40,467	120,361	231,207	
Typewriters	28	26,004	73,377	23,883	63,709	121,385	
Scales and balances	75	6,526	18,849	4,874	12,847	34,766	
Office and store machines, n. e. c.	201	18,273	56,181	15,161	41,541	116,496	
Service and household machines	1,088	220,286	659,982	180,771	504,203	1,105,708	
Domestic laundry equipment	65	28,403	85,596	23,651	65,596	161,791	
Laundry and dry-cleaning machinery	127	9,093	27,435	6,888	19,015	54,347	
Sewing machines	70	18,305	48,484	12,647	37,926	68,681	
Vacuum cleaners	34	14,880	44,797	12,232	35,266	91,047	
Refrigeration machinery	561	129,290	380,216	108,316	299,175	597,486	
Measuring and dispensing pumps	52	12,083	36,972	8,884	24,174	66,223	
Service and household machines, n. e. c.	179	11,232	36,482	8,153	23,051	66,223	
Miscellaneous machinery parts	3,871	200,977	587,618	167,841	459,530	983,576	
Valves and fittings, exc. plumbers'	453	80,075	238,951	65,855	184,638	303,860	
Fabricated pipe and fittings	212	10,568	33,362	8,273	23,172	58,786	
Ball and roller bearings	94	52,174	153,333	45,075	125,711	259,060	
Machine shops	3,112	58,160	161,072	48,038	126,009	271,370	
<b>Electrical machinery</b>	<b>3,973</b>	<b>801,359</b>	<b>2,271,039</b>	<b>639,147</b>	<b>1,647,401</b>	<b>3,894,115</b>	
Electrical industrial apparatus	1,567	321,352	940,861	253,575	683,452	1,616,393	
Wiring devices and supplies	1,342	38,367	102,322	32,452	77,451	213,596	
Carbon and graphite products	44	7,818	22,028	6,426	16,504	40,218	
Elec. measuring instruments	154	20,926	60,661	16,086	42,326	103,946	
Motors and generators	256	127,012	374,135	101,852	282,252	589,745	
Transformers	144	36,635	107,978	28,180	78,525	195,102	
Electrical control apparatus	324	72,330	215,974	54,589	148,360	395,175	
Electrical welding apparatus	108	7,265	29,151	5,139	17,709	57,310	
Elec. industrial apparatus, n. e. c.	195	10,999	28,612	8,871	20,325	41,306	
Electrical appliances	326	44,371	124,957	37,271	96,654	236,241	
Insulated wire and cable	171	21,282	58,044	18,185	45,375	103,722	
Engine electrical equipment	110	43,920	125,393	37,978	102,144	196,351	
Electric lamps	62	23,842	57,014	21,550	48,891	120,344	
Communication equipment	1,210	303,391	847,247	234,706	581,158	1,374,117	
Radios and related products	857	178,595	462,207	142,478	324,300	773,233	
Electronic tubes	51	27,703	65,420	22,571	46,704	94,040	
Phonograph records	111	10,045	29,193	8,246	22,840	75,660	
Telephone and telegraph equipment	90	76,072	258,507	53,630	167,498	384,417	
Communication equipment, n. e. c.	101	10,076	31,860	7,781	19,826	46,767	
Miscellaneous electrical products	527	43,201	116,623	35,882	89,727	246,942	
Storage batteries	246	16,570	48,379	13,632	38,257	114,246	
Primary batteries (dry and wet)	38	10,261	24,463	9,181	20,656	45,275	
X-ray and therapeutic apparatus	116	7,678	23,217	5,621	15,344	38,635	
Electrical products, n. e. c.	127	8,692	20,564	7,448	15,460	48,786	

For footnotes, see p. 943.

No. 1028.—MANUFACTURES—GENERAL STATISTICS, BY INDUSTRY: 1947 AND 1939—  
Continued

INDUSTRY	1947					Number of pro- duction workers (average for the year), 1939	
	Number of estab- lish- ments	All employees <sup>1</sup>		Production workers			
		Number (average for the year)	Salaries and wages, total (\$1,000)	Number (average for the year)	Wages, total (\$1,000)		
<b>Transportation equipment.</b>							
Motor vehicles and equipment.	3,711	1,181,680	3,719,583	987,142	2,939,815	5,869,196	
Motor vehicles and parts.	1,904	701,121	2,207,456	599,301	1,797,805	3,819,076	
Truck and bus bodies.	963	653,169	2,067,473	558,693	1,687,685	3,577,404	
Truck trailers.	603	26,646	78,386	22,876	62,664	127,420	
Automobile trailers.	119	12,020	34,883	9,400	25,256	65,257	
Aircraft and parts.	210	9,286	26,764	8,332	22,200	48,986	
Aircraft.	332	219,611	703,702	162,596	476,297	954,575	
Aircraft engines.	58	146,625	462,906	110,332	316,795	605,983	
Aircraft propellers.	57	50,253	165,554	35,872	110,177	251,158	
Aircraft equipment, n. e. c.	13	7,423	25,666	4,822	15,230	26,685	
Ships and boats.	204	15,310	49,576	11,570	34,095	70,749	
Ship building and repairing.	1,110	149,655	467,585	132,033	394,371	586,558	
Boat building and repairing.	301	130,200	416,828	114,718	350,836	517,604	
Railroad equipment.	809	19,455	51,757	17,315	43,535	60,054	
Locomotives and parts.	122	91,116	283,552	75,091	224,867	415,607	
Railroad and street cars.	36	30,337	97,608	25,368	78,131	142,477	
Motorcycles and bicycles.	86	60,779	185,944	50,323	146,736	273,130	
Transportation equipment, n. e. c.	76	15,615	45,661	13,659	37,732	72,838	
Instruments and related products.	187	4,562	11,027	3,802	8,743	20,542	
Scientific instruments.	2,599	231,997	665,347	181,939	467,785	1,080,336	
Mechanical measuring instruments.	216	20,884	61,710	15,023	41,881	83,010	
Optical instruments and lenses.	403	53,237	155,589	40,937	100,196	245,144	
Medical instruments and supplies.	114	6,458	18,604	5,228	14,025	26,743	
Surgical and medical instruments.	980	38,309	107,837	29,617	71,281	184,005	
Surgical appliances and supplies.	139	6,980	20,297	5,818	15,281	30,214	
Dental equipment and supplies.	628	22,315	61,915	16,067	38,696	111,526	
Ophthalmic goods.	213	9,074	25,625	7,132	17,304	42,025	
Photographic equipment.	184	22,457	56,811	10,744	46,224	81,530	
Watches and clocks.	366	50,911	154,416	36,273	101,765	204,784	
Watches and clocks.	276	40,181	110,311	35,117	83,403	104,460	
Watchcases.	194	34,623	93,331	30,237	70,372	169,474	
Miscellaneous manufactures.	82	5,558	16,980	4,880	13,061	24,986	
Jewelry and silverware.	14,131	464,420	1,205,508	397,579	920,508	2,090,168	
Jewelry (precious metal).	2,081	54,827	167,433	45,880	126,947	302,859	
Jeweler's findings.	1,344	25,566	76,402	20,610	54,222	140,478	
Lapidary work.	182	6,056	17,350	5,203	12,380	29,714	
Silverware and plated ware.	270	1,699	5,524	1,525	4,532	10,860	
Musical instruments and parts.	235	21,506	68,097	18,542	55,804	121,807	
Pianos.	260	16,889	46,808	14,814	38,108	71,356	
Organs.	27	6,978	20,573	6,170	16,048	31,007	
Piano and organ parts.	64	4,546	11,764	4,059	9,832	18,137	
Musical instruments, n. e. c.	169	5,305	14,471	4,585	11,418	22,122	
Toys and sporting goods.	2,198	75,493	173,833	67,228	138,350	294,727	
Games and toys, n. e. c.	837	27,140	60,554	24,174	47,403	105,414	
Dolls.	377	9,797	21,847	8,886	17,739	37,577	
Children's vehicles.	120	8,783	24,735	7,773	19,423	44,204	
Sporting and athletic goods.	864	29,773	66,687	26,395	53,785	107,532	
Office supplies.	787	31,557	82,074	24,734	55,553	163,100	
Pens and mechanical pencils.	184	15,553	40,006	12,527	28,207	89,807	
Lead pencils and crayons.	50	6,279	14,726	5,190	10,409	23,633	
Hand stamps and stencils.	426	4,684	12,900	3,462	8,729	20,047	
Artists' materials.	60	1,360	3,220	997	1,944	5,908	
Carbon paper and inked ribbons.	67	3,681	10,622	2,558	6,264	23,615	
Costume jewelry and notions.	2,084	65,878	153,561	57,593	118,502	262,085	
Costume jewelry.	859	25,371	59,487	22,206	45,979	107,224	
Artificial flowers.	445	7,130	13,448	6,569	10,713	23,813	
Buttons.	453	10,418	21,835	9,417	17,542	4,463	
Needles, pins, and fasteners.	277	22,959	58,791	19,341	44,328	10,072	
Plastics products, n. e. c.	1,360	60,092	159,024	51,612	123,583	289,504	

For footnotes, see p. 943.

## MANUFACTURES BY INDUSTRY

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## NO. 1028.—MANUFACTURES—GENERAL STATISTICS, BY INDUSTRY: 1947 AND 1939—Continued

INDUSTRY	1947					Number of production workers (average for the year), 1939	
	Number of establishments	All employees <sup>1</sup>		Production workers			
		Number (average for the year)	Salaries and wages, total (\$1,000)	Number (average for the year)	Wages, total (\$1,000)		
<b>Miscellaneous manufactures—Continued</b>							
Miscellaneous manufactures	5,461	159,684	422,775	135,818	319,315	705,787	
Brooms and brushes	706	18,551	44,875	15,543	31,162	87,288	
Cork products	36	2,485	6,802	2,150	5,427	11,057	
Matches	29	7,350	16,422	6,612	13,406	31,302	
Candles	54	2,405	5,596	1,933	3,704	8,911	
Fireworks and pyrotechnics	73	3,251	6,694	2,982	5,706	8,626	
Jewelry and instrument cases	165	7,333	16,446	6,681	13,280	26,460	
Lamp shades	291	4,488	8,473	4,100	7,045	14,668	
Morticians' goods	568	22,375	60,002	18,242	42,588	92,395	
Beauty and barber shop equipment	70	4,065	11,884	3,185	7,698	17,840	
Furs, dressed and dyed	175	6,848	25,540	6,147	21,678	42,954	
Signs and advertising displays	1,983	28,878	82,045	24,328	62,026	130,454	
Hair work	87	1,170	2,436	1,046	2,040	4,380	
Umbrellas, parasols, and canes	164	3,585	8,360	3,267	6,490	15,421	
Tobacco pipes	76	3,140	8,810	2,745	6,302	13,738	
Soda-fountain and bar equipment	67	2,739	8,488	2,231	6,524	16,254	
Models, and patterns (except paper)	209	1,868	5,144	1,691	4,325	8,573	
Small arms	34	10,453	30,545	9,249	25,876	42,314	
Small arms ammunition	8	8,050	22,091	6,748	17,297	40,840	
Miscellaneous products, n. e. c.	666	20,599	52,122	16,938	36,948	91,712	

<sup>1</sup> Includes all full-time and part-time production and related workers, force-account construction workers, clerical and routine office workers, administrative, supervisory, sales, technical, and all other personnel on the pay rolls of manufacturing establishments. Excludes employees of central administrative offices operated by concerns having 2 or more manufacturing establishments. Wages and salaries represent the gross earnings of employees including commissions, dismissal pay, nonproduction bonuses, vacation and sick leave pay, and compensation in kind, and prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds.

<sup>2</sup> Value of products less cost of materials, supplies, fuel, electricity, and contract work.

<sup>3</sup> There were no establishments classified in this industry in 1939.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

No. 1029.—MANUFACTURES—GENERAL STATISTICS, BY STATES: 1947 AND 1939  
 [Money figures in thousands of dollars. See general note, p. 924]

DIVISION AND STATE	1947						1939 <sup>a</sup>	
	Number of establishments	All employees <sup>1</sup>		Production workers		Value added by manufacture <sup>2</sup>	Number of production workers (average for year)	Value added by manufacture <sup>2</sup>
		Number (average for year)	Salaries and wages, total	Number (average for year)	Wages, total			
United States	240,881	14,294,304	39,689,527	11,916,188	30,242,343	74,425,825	7,808,205	24,486,556
New England								
Maine	20,274	1,474,684	3,941,011	1,248,325	3,054,119	6,813,800	947,412	2,414,268
Maine	1,035	100,181	233,994	90,378	199,204	432,123	74,040	150,588
New Hampshire	1,124	74,752	177,479	66,448	145,324	306,932	55,434	104,453
Vermont	830	34,872	83,021	30,239	66,400	149,685	20,498	49,741
Massachusetts	10,524	718,441	1,923,141	601,603	1,464,047	3,370,004	458,372	1,181,465
Rhode Island	2,214	146,850	374,582	128,130	297,599	658,420	106,089	237,098
Connecticut	3,947	399,588	1,148,794	331,527	881,545	1,896,546	232,979	690,323
Middle Atlantic	75,363	3,953,773	11,412,746	3,245,879	8,513,464	20,790,626	2,234,295	7,308,780
New York	47,819	1,775,975	5,279,686	1,424,705	3,815,374	9,666,588	949,302	3,313,649
New Jersey	10,755	738,229	2,214,159	601,748	1,644,207	4,177,080	431,552	1,518,209
Pennsylvania	16,789	1,439,634	3,918,901	1,219,426	3,035,879	6,946,958	853,371	2,476,802
East North Central	50,570	4,317,892	13,007,601	3,565,172	9,935,496	23,473,563	2,180,600	7,744,406
Ohio	12,303	1,194,603	3,560,075	988,446	2,727,481	6,359,006	595,520	2,116,434
Indiana	5,408	548,346	1,587,518	457,582	1,236,558	2,977,508	275,272	964,746
Illinois	15,988	1,184,820	3,585,093	954,415	2,627,818	6,080,137	500,095	2,187,240
Michigan	9,892	973,675	3,090,668	821,721	2,438,027	5,196,338	520,165	1,794,016
Wisconsin	6,979	416,448	1,184,247	343,008	900,112	2,260,574	198,648	681,970
West North Central	17,403	785,064	2,063,739	635,940	1,508,105	4,119,409	376,156	1,348,167
Minnesota	4,507	179,986	501,355	145,153	358,863	1,022,580	78,023	306,840
Iowa	2,965	140,425	372,339	112,490	275,454	671,100	64,773	243,390
Missouri	5,725	327,552	827,184	269,711	607,404	1,023,145	175,988	581,804
North Dakota	362	5,218	12,341	3,823	8,490	29,461	2,005	10,984
South Dakota	494	10,265	25,796	8,062	19,193	51,398	5,421	19,610
Nebraska	1,344	47,031	119,923	37,338	87,432	260,658	18,416	68,139
Kansas	1,946	74,624	204,801	59,363	151,269	401,061	30,035	117,301
South Atlantic	24,001	1,523,495	3,370,875	1,344,444	2,709,342	6,942,054	977,596	2,216,976
Delaware	482	34,465	92,183	29,014	70,007	182,088	19,825	54,085
Maryland	2,824	228,552	612,034	188,638	458,243	1,138,407	140,030	420,539
Dist. of Columbia	428	17,815	55,872	10,007	27,691	69,067	7,767	43,367
Virginia	3,644	216,637	483,994	190,035	384,441	1,051,020	132,089	370,250
West Virginia	1,602	127,353	337,869	108,984	268,469	663,903	74,411	213,284
North Carolina	5,322	381,480	758,895	350,207	641,966	1,646,073	206,238	544,181
South Carolina	2,137	188,601	376,964	175,724	330,465	794,312	126,408	169,294
Georgia	4,754	249,926	484,246	225,807	390,820	1,015,999	155,870	280,032
Florida	2,808	78,666	168,818	66,028	128,240	349,976	51,149	115,885
East South Central	10,907	633,765	1,360,231	558,191	1,093,293	2,875,428	355,096	823,101
Kentucky	2,244	129,504	304,668	110,602	235,089	740,772	62,481	186,485
Tennessee	3,346	221,454	473,211	192,367	369,020	957,539	131,024	318,378
Alabama	3,335	200,136	444,647	185,045	372,404	876,938	115,608	245,577
Mississippi	1,982	76,671	137,705	69,577	114,980	300,184	45,893	72,601
West South Central	13,181	550,241	1,333,054	456,123	995,239	3,027,709	258,882	815,276
Arkansas	1,924	65,321	124,167	58,254	101,809	265,144	35,672	66,444
Louisiana	2,389	132,464	309,871	111,563	229,673	694,074	70,453	198,527
Oklahoma	1,740	55,403	143,605	44,302	105,277	341,027	27,042	101,782
Texas	7,128	207,053	755,411	242,014	558,420	1,727,464	125,115	448,523
Mountain	5,049	141,638	379,900	116,199	298,601	833,202	67,011	269,331
Montana	652	16,092	43,481	13,600	35,350	92,258	8,802	38,828
Idaho	664	16,907	45,748	14,602	37,904	100,694	9,894	29,738
Wyoming	256	5,007	16,696	4,285	12,291	34,957	3,351	15,336
Colorado	1,602	54,071	144,207	44,153	109,734	280,774	23,388	90,330
New Mexico	432	7,500	18,222	6,349	14,173	55,486	3,219	8,640
Arizona	545	14,188	39,333	11,167	29,680	103,958	5,905	31,625
Utah	772	24,516	63,804	19,973	48,053	128,298	11,467	43,341
Nevada	126	2,667	8,409	2,064	6,416	27,777	1,025	11,403
Pacific	24,133	913,737	2,820,370	745,915	2,139,688	5,544,034	411,038	1,546,957
Washington	3,410	144,324	438,020	123,488	354,596	874,036	82,261	267,716
Oregon	3,075	105,591	317,827	92,144	265,837	675,017	57,487	156,006
California	17,648	663,872	2,064,528	530,283	1,510,255	3,904,981	271,290	1,122,546

<sup>1</sup> Includes all full-time and part-time production and related workers, force-account construction workers, clerical and routine office workers, administrative, supervisory, sales, technical, and all other personnel on pay rolls of manufacturing establishments. Excludes employees of central administrative offices operated by concerns having 2 or more manufacturing establishments. Wages and salaries represent gross earnings of employees including commissions, dismissal pay, nonproduction bonuses, vacation and sick leave pay, and compensation in kind, and prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds.

<sup>2</sup> Value of products less cost of materials, supplies, fuel, electricity, and contract work.

<sup>3</sup> Figures will not add to totals because of rounding.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

## MANUFACTURES—METROPOLITAN AREAS

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## No. 1030.—MANUFACTURES—GENERAL STATISTICS FOR STANDARD METROPOLITAN AREAS: 1947 AND 1939

**[Money figures in thousands of dollars.** Data cover standard metropolitan areas having 40,000 or more manufacturing employees in 1947. These areas replace industrial areas shown in earlier censuses. Industrial areas, as defined in previous years, were groups of contiguous counties having large numbers of manufacturing wage earners. Present standard metropolitan areas are integrated economic and social entities which contain not only highly industrialized counties, but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force. The 53 areas presented in this table represent a part of a larger list of standard metropolitan areas recently established by the Federal Government for the use of all Government statistical collection agencies. Standard metropolitan areas are composed of whole counties in all parts of the U. S., with the exception of New England where they are composed of towns. For definition of each area, see 1947 Census of Manufactures preliminary report, series MC 100-3 or final report, Vol. III.]

AREA	1947 (preliminary)					1939	
	Number of establish- ments (average for the year)	All employees <sup>1</sup>		Production workers	Value added by man- ufac- ture <sup>2</sup>	Number of pro- duction workers (average for the year)	Value added by man- ufac- ture <sup>2</sup>
		Number (average for the year)	Salaries and wages, total	Wages, total			
United States.....	240,881	14,294,304	39,689,527	11,916,188	30,242,343	74,425,825	7,808,205
Standard metropolitan areas total.....	135,205	8,513,438	25,510,924	6,926,142	18,955,595	46,312,425	4,490,085
Akron.....	482	94,011	284,302	75,289	215,444	460,327	40,114
Albany-Schenectady-Troy.....	599	70,839	202,484	55,023	146,122	322,172	36,217
Allentown-Bethlehem-Easton.....	898	88,539	222,094	76,285	177,416	360,314	59,181
Atlanta.....	872	49,034	112,049	40,505	80,889	237,012	27,092
Baltimore.....	1,785	170,062	482,043	138,810	359,340	899,534	105,786
Birmingham.....	530	53,295	137,845	44,748	106,619	275,326	28,774
Boston.....	5,406	271,273	752,788	215,264	530,965	1,391,157	157,230
Bridgeport.....	585	70,127	203,592	56,014	151,927	342,760	34,348
Buffalo.....	1,694	183,876	557,384	149,768	425,314	1,023,231	90,244
Canton.....	385	55,564	158,649	47,600	128,551	280,241	28,854
Chicago.....	12,284	945,326	2,990,068	755,115	2,175,307	5,529,062	478,126
Cincinnati.....	1,700	135,774	382,955	108,476	274,717	777,201	72,401
Cleveland.....	3,258	268,750	866,849	218,029	645,539	1,546,117	129,358
Columbus (Ohio).....	670	54,877	153,462	42,363	105,356	277,809	25,309
Dayton.....	638	95,347	308,299	79,433	240,266	496,380	40,200
Detroit.....	4,765	555,788	1,846,006	466,922	1,451,803	2,910,650	315,221
Erie.....	368	46,286	134,693	35,076	103,640	224,906	19,216
Fall River-New Bedford.....	588	62,572	142,422	57,379	122,624	244,346	48,127
Flint.....	214	55,150	171,859	47,887	141,033	324,507	33,072
Grand Rapids.....	694	49,241	147,276	41,961	114,990	255,255	23,882
Hartford.....	584	63,700	189,160	52,014	142,673	300,353	31,588
Houston.....	916	58,606	182,282	46,001	131,512	335,549	22,600
Indianapolis.....	944	92,649	279,361	73,168	198,676	484,860	38,705
Kansas City.....	1,345	78,645	218,827	61,688	155,340	469,504	38,085
Los Angeles.....	9,770	358,772	1,118,344	281,806	797,090	2,052,671	127,425
Louisville.....	743	73,791	196,864	60,827	148,607	458,956	35,009
Milwaukee.....	1,963	177,202	535,089	141,172	306,832	973,935	79,473
Minneapolis-St. Paul.....	2,117	118,824	348,278	93,986	239,110	714,565	48,710
New Britain-Bristol.....	298	45,708	132,524	38,507	105,823	205,103	23,564
New Haven.....	577	41,503	115,374	34,395	86,140	188,528	24,528
New Orleans.....	724	45,363	105,210	37,932	78,201	222,995	25,509
New York-Northeastern N. J. ....	48,304	1,004,184	932,996	1,274,375	3,495,956	9,322,683	867,953
Peoria.....	278	42,511	123,726	34,492	94,376	280,670	18,875
Philadelphia.....	7,399	532,492	1,530,940	437,553	1,140,317	2,803,106	320,627
Pittsburgh.....	2,223	337,974	1,023,913	284,017	807,132	1,707,918	191,278
Portland (Oregon).....	1,297	51,643	153,747	42,675	119,893	315,073	29,875
Providence.....	2,363	152,845	302,553	132,506	309,014	689,043	95,411
Reading.....	617	53,423	136,503	46,756	111,376	230,962	40,537
Rochester.....	910	104,907	307,821	80,735	218,838	510,225	50,809
St. Louis.....	2,960	244,490	664,733	200,098	490,035	1,296,471	128,416
San Francisco-Oakland.....	3,672	163,641	526,747	131,161	393,346	1,049,490	76,044
Seattle.....	1,222	54,786	171,256	44,682	129,938	265,458	23,581
South Bend.....	253	44,180	144,419	37,675	117,504	234,908	20,819
Springfield-Holyoke.....	831	81,593	233,624	67,366	177,556	371,902	38,504
Syracuse.....	512	54,663	168,093	43,328	116,729	275,257	25,563
Toledo.....	627	69,599	221,562	56,730	167,461	390,022	30,542
Trenton.....	402	40,422	113,283	34,094	88,389	208,485	25,287
Utica-Rome.....	429	50,563	139,504	45,854	113,258	231,009	32,203
Waterbury.....	295	43,388	125,719	36,386	98,557	206,291	28,537
Wheeling-Steubenville.....	343	51,751	147,020	46,494	125,513	259,509	41,228
Worcester.....	702	63,251	153,583	43,525	114,474	241,917	32,033
York.....	597	41,932	100,709	35,569	76,640	180,358	27,114
Youngstown.....	552	108,654	330,825	94,263	273,621	567,307	63,010

<sup>1</sup> Includes all full-time and part-time production and related workers, force-account construction workers, clerical and routine office workers, administrative, supervisory, sales, technical, and all other personnel on the pay rolls of manufacturing establishments. Excludes employees of central administrative offices operated by concerns having 2 or more manufacturing establishments. Wages and salaries represent gross earnings of employees including commissions, dismissal pay, nonproduction bonuses, vacation and sick leave pay, and compensation in kind, and prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds.

<sup>2</sup> Value of products less cost of materials, supplies, fuel, electricity, and contract work.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

## No. 1031.—MANUFACTURES—EXPENDITURES FOR PLANT AND EQUIPMENT, BY MAJOR INDUSTRY GROUPS: 1947 AND 1939

In thousands of dollars. Excludes data for certain small establishments which were not asked to report on capital expenditures. It is estimated that establishments covered by this table accounted for over 98 percent of capital expenditures made by all manufacturing establishments. Figures refer to all costs actually incurred during year chargeable to fixed assets accounts of manufacturing establishments and for which depreciation accounts are maintained. Excludes expenditures for following: Maintenance and repair, new manufacturing establishments under construction but not in operation during year, nonmanufacturing establishments owned by manufacturing concerns, and expenditures made by owners of plant and equipment leased to manufacturers.

MAJOR INDUSTRY GROUP	1947						1939					
	Expenditures for new plant and equipment						Expenditures for new plant and equipment					
	New construction			New machinery and equipment			New construction			New machinery and equipment		
Total expenditures	Total	Building	Other	Total	Production machinery and equipment	Other machinery and equipment	Total	New construction	Total	New construction	Total	New machinery and equipment
All industries, total	6,627,029	6,008,873	2,122,143	1,501,430	620,713	3,881,750	3,360,408	521,322	623,156	1,248,078	391,285	866,793
Food and kindred products	888,668	820,947	250,095	267,708	544,044	395,810	148,234	67,716	194,587	60,750	133,837	
Tobacco manufactures	36,403	35,645	12,919	12,076	843	22,725	21,336	1,350	7,755	2,116	2,088	5,133
Textile mill products	386,270	367,510	104,706	98,305	11,311	262,804	246,055	16,749	18,760	84,633	16,719	67,914
Apparel and related products	91,555	88,945	22,114	19,574	2,540	61,831	50,169	11,672	7,640	14,632	3,534	11,058
Lumber and products, exc. furniture	205,444	171,574	66,088	38,381	17,667	115,626	83,386	32,140	31,870	29,905	11,853	18,052
Furniture and fixtures	82,146	77,441	26,247	22,846	3,401	51,104	45,218	5,376	4,705	10,807	3,529	7,386
Paper and allied products	424,141	406,779	117,231	99,354	17,877	289,548	270,151	19,397	17,362	65,597	17,743	47,864
Printing and publishing industries	242,525	226,938	82,148	77,341	4,802	144,225	123,905	20,320	16,157	42,713	8,583	34,130
Chemicals and allied products	895,041	810,732	279,739	182,385	96,354	530,935	470,527	60,466	82,309	116,638	30,516	86,122
Petroleum and coal products	436,521	396,754	317,440	41,570	276,870	82,314	70,837	11,417	39,767	120,672	92,221	28,441
Rubber products	117,084	109,783	30,889	25,910	4,983	78,890	75,264	3,626	7,301	27,523	3,749	23,780
Leather and leather products	34,320	31,301	8,064	7,352	712	23,237	19,593	3,644	3,010	9,349	2,612	6,737
Stone, clay, and glass products	296,457	285,086	104,378	78,705	25,673	180,658	161,711	18,977	11,891	51,338	19,036	32,302
Primary metal industries	669,853	592,177	212,087	126,410	86,277	378,490	351,227	26,263	27,676	136,755	48,679	88,106
Fabricated metal products	332,355	304,822	92,119	82,497	9,622	212,703	189,037	23,666	27,533	61,488	11,765	49,723
Machinery (except electrical)	598,260	517,589	167,396	163,519	13,877	350,193	306,882	43,361	80,671	91,557	17,669	73,888
Electrical machinery	276,078	244,906	64,374	58,900	6,274	179,722	155,800	23,932	31,472	37,000	6,511	31,549
Transportation equipment	437,890	354,974	99,514	86,996	12,518	245,460	222,126	33,594	77,616	108,250	24,940	83,310
Instruments and related products	66,721	55,800	15,313	14,973	740	40,687	34,923	5,764	9,721	16,200	4,970	11,230
Miscellaneous manufactures	116,672	109,960	31,515	28,861	2,664	76,445	66,451	8,994	9,712	21,052	4,733	16,289

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

## No. 1032.—MANUFACTURES—EXPENDITURES FOR PLANT AND EQUIPMENT, BY STATES: 1947 AND 1939

[In thousands of dollars. See headnote, table 1031]

DIVISION AND STATE	Total expenditures for plant and equipment	1947			1939			
		Expenditures for new plant and equipment			Expenditures for used plant and equipment and land	Expenditures for new plant and equipment		
		Total	New construction	New machinery and equipment		Total	New construction	
United States	6,627,029	6,003,873	2,122,143	3,881,730	623,156	1,248,078	391,285	856,793
New England	475,422	418,580	115,151	303,429	56,842	101,853	22,231	79,622
Maine	36,996	35,055	12,708	22,347	1,941	7,489	2,662	4,827
New Hampshire	26,076	24,010	5,994	18,016	2,066	3,280	848	2,432
Vermont	10,681	9,698	3,051	6,647	983	2,488	648	1,840
Massachusetts	215,929	198,985	52,426	146,559	16,944	46,785	9,795	36,990
Rhode Island	37,842	34,609	8,117	26,492	3,233	9,972	1,794	8,178
Connecticut	147,898	116,223	32,855	83,368	31,675	31,839	6,484	25,355
Middle Atlantic	1,468,235	1,335,235	446,679	888,556	133,000	308,171	89,290	218,881
New York	556,980	497,443	152,173	345,270	59,537	116,635	29,847	86,788
New Jersey	320,999	303,987	93,130	210,857	26,005	77,664	22,464	55,200
Pennsylvania	581,263	533,805	201,376	332,429	47,458	113,872	36,979	76,583
East North Central	2,052,310	1,869,322	667,526	1,201,796	182,988	421,071	125,749	295,322
Ohio	537,703	498,254	179,293	318,961	39,449	106,957	31,125	81,125
Indiana	320,999	202,104	145,724	156,380	18,896	69,515	31,111	38,404
Illinois	548,580	475,431	168,066	310,365	70,149	103,052	36,049	67,603
Michigan	463,604	427,746	119,255	308,492	35,948	110,197	26,142	84,055
Wisconsin	181,334	162,787	55,189	107,598	18,547	30,750	6,615	24,135
West North Central	366,638	340,462	123,332	217,130	26,176	56,596	18,142	38,454
Minnesota	89,005	82,800	29,438	53,362	6,205	11,899	3,642	8,257
Iowa	70,437	64,686	23,041	41,645	5,751	10,040	4,008	6,032
Missouri	139,499	132,166	50,531	81,635	7,333	22,207	5,689	16,708
North Dakota	2,378	2,250	—	859	1,391	128	186	307
South Dakota	3,640	3,371	1,252	2,119	269	749	259	490
Nebraska	20,154	18,402	6,472	11,930	1,752	3,082	1,179	2,503
Kansas	41,625	36,787	11,730	25,048	4,738	7,346	3,279	4,067
South Atlantic	736,185	677,651	224,207	453,444	58,534	139,620	38,884	100,736
Delaware	21,527	21,137	5,594	15,543	390	2,558	697	1,861
Maryland	136,741	123,599	49,041	74,493	13,142	24,583	7,004	16,679
District of Columbia	5,312	4,502	976	3,526	810	1,320	279	1,041
Virginia	120,137	112,383	33,902	78,481	7,754	20,190	6,085	14,105
West Virginia	93,476	82,332	27,364	54,968	11,144	23,667	4,777	18,890
North Carolina	144,388	137,583	42,812	94,771	6,805	30,148	7,636	22,512
South Carolina	66,579	61,743	20,189	41,554	4,836	10,968	2,946	8,022
Georgia	90,412	84,320	28,147	56,173	6,092	18,105	5,439	12,666
Florida	57,613	50,052	16,117	33,935	7,561	8,081	3,121	4,960
East South Central	274,955	256,002	80,931	175,071	18,953	49,610	12,810	36,800
Kentucky	84,499	77,135	27,197	49,938	7,364	9,138	2,902	6,236
Tennessee	89,362	83,792	24,356	59,436	5,570	22,774	5,064	17,710
Alabama	76,803	72,362	22,752	49,610	4,441	11,977	3,095	8,882
Mississippi	24,291	22,713	6,626	16,087	1,578	5,721	1,749	3,972
West South Central	531,571	457,920	205,644	252,276	73,651	74,217	43,706	30,511
Arkansas	33,992	30,262	11,569	18,693	3,730	4,357	1,736	2,621
Louisiana	102,437	97,210	32,597	64,613	5,227	15,807	6,617	9,190
Oklahoma	35,535	25,504	12,252	13,252	10,031	5,551	2,829	2,722
Texas	359,607	304,944	149,226	155,718	54,663	48,502	32,524	15,978
Mountain	100,745	95,023	33,296	61,727	5,722	15,592	6,469	9,123
Montana	7,788	7,446	1,708	5,738	342	3,046	1,225	1,821
Idaho	12,116	11,447	3,903	7,644	669	1,707	743	964
Wyoming	11,594	10,235	8,756	1,479	1,359	784	308	476
Colorado	33,370	32,189	8,406	23,783	1,190	6,037	2,443	3,594
New Mexico	6,181	5,431	1,810	3,621	750	993	536	457
Arizona	8,761	8,328	3,131	5,197	433	971	264	707
Utah	17,877	16,988	4,171	12,817	889	1,789	859	930
Nevada	3,040	2,959	1,411	1,548	90	265	91	174
Pacific	620,968	553,678	225,377	328,301	67,290	81,348	34,004	47,344
Washington	94,447	81,476	28,707	52,769	12,971	12,862	6,323	6,529
Oregon	72,946	61,669	23,435	38,234	11,277	9,626	3,161	6,465
California	453,575	410,533	173,235	237,298	43,042	58,860	24,510	34,359

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

## No. 1033.—INVENTORIES IN HANDS OF MANUFACTURERS AT BEGINNING AND END OF 1947, BY MAJOR INDUSTRY GROUPS

[In thousands of dollars. Inventory statistics exclude data for industries in printing and publishing groups, small sawmills, and certain small establishments in other industries. It is estimated that for industry groups shown, figures represent 99 percent of all inventories held by them. Figures cover inventories held for account of individual manufacturing establishments and exclude inventories held for account of sales branches, central warehouses, or central administrative offices of manufacturing concerns]

MAJOR INDUSTRY GROUP	INVENTORIES AT BEGINNING OF YEAR			INVENTORIES AT END OF YEAR		
	Total	Finished products <sup>1</sup>	Materials, supplies, and work in process <sup>2</sup>	Total	Finished products <sup>1</sup>	Materials, supplies, and work in process <sup>2</sup>
All industries, total.....	22,432,422	6,159,703	16,272,719	26,129,137	7,808,637	18,320,500
Food and kindred products.....	3,429,199	1,522,149	1,967,050	4,078,750	1,943,108	2,135,642
Tobacco manufactures.....	1,033,759	391,569	642,190	1,117,664	465,754	651,910
Textile mill products.....	1,609,619	339,750	1,269,869	1,788,166	385,472	1,402,694
A Apparel and related products.....	1,087,339	365,489	721,850	1,257,372	449,004	808,278
Lumber and products, exc. furniture.....	497,580	200,015	207,565	653,637	275,277	378,360
Furniture and fixtures.....	342,280	61,108	281,172	401,311	83,053	318,258
Paper and allied products.....	536,913	91,644	446,209	714,223	125,316	588,907
Printing and publishing industries.....	(*)	(*)	(*)	(*)	(*)	(*)
Chemicals and allied products.....	1,743,370	505,525	1,237,845	2,062,730	650,037	1,412,693
Petroleum and coal products.....	730,588	400,293	330,295	888,583	453,600	484,977
Rubber products.....	373,058	98,427	274,631	413,785	152,907	260,818
Leather and leather products.....	447,705	102,289	345,416	508,276	120,257	388,019
Stone, clay, and glass products.....	391,146	137,933	263,213	404,666	184,543	310,123
Primary metal industries.....	1,719,943	368,501	1,351,442	1,968,469	441,282	1,527,187
Fabricated metal products.....	1,254,132	233,753	1,020,379	1,500,320	315,039	1,184,681
Machinery (except electrical).....	2,833,852	677,702	2,156,060	3,354,237	800,262	2,463,975
Electrical machinery.....	1,342,433	188,439	1,153,994	1,489,516	291,340	1,198,176
Transportation equipment.....	2,048,774	242,172	1,806,602	2,377,482	296,994	2,080,488
Instruments and related products.....	382,098	83,172	298,926	429,047	103,757	325,200
Miscellaneous manufactures.....	568,634	149,683	418,951	630,903	180,879	450,024

<sup>1</sup> Includes value of goods produced by contract work on materials owned by manufacturers reporting.

<sup>2</sup> Includes value of fuel and all other inventories.

<sup>\*</sup> Data not collected.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

## DISTILLED SPIRITS

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No. 1034.—ETHYL ALCOHOL AND OTHER DISTILLED SPIRITS, EXCEPT BRANDY—  
MATERIALS USED IN PRODUCTION, BY KINDS: 1901 TO 1948

YEARLY AVERAGE OR YEAR ENDING JUNE 30	Molas- ses (thou- sand gallons)	GRAIN (THOUSANDS OF POUNDS) <sup>1</sup>				ETHYL SUL- PHATE	PINE- APPLE JUICE	OTHER MATERIALS <sup>2</sup>	
		Corn	Malt	Rye	Other <sup>3</sup>			Thou- sand gallons	Thou- sand pounds
1901-1905	14,059	1,094,027	197,802	303,038	3,349				
1906-1910	30,630	1,114,277	202,720	280,112	1,893				
1911-1915	71,726	1,183,706	209,194	275,374	5,029				
1916-1920	109,627	958,003	125,429	65,139	5,298			49,457	
1921-1925	144,652	259,134	53,502	5,219	4,854			42,340	5,89,387
1926-1930	239,279	473,682	29,613	2,722	1,008	1,274		43,546	53,901
1931-1935	167,204	480,276	101,183	245,457	5,252	10,686	5,671	8,802	20,606
1936-1940	183,214	1,398,797	267,247	466,285	3,179	31,530	3,509	12,075	3,190
1941-1945	240,247	1,682,322	562,455	348,848	3,069,179	77,809	2,948	15,085	49,748
1911	44,363	1,301,832	226,968	301,056	5,096				
1912	61,605	1,288,952	228,256	313,600	4,760				
1913	64,641	1,335,488	238,168	326,368	6,160				
1914	64,721	1,193,696	220,584	299,152	4,648				
1915	123,301	798,560	131,992	136,696	4,480				
1916	80,977	1,705,920	250,936	174,552	4,502			71,165	
1917	112,498	1,902,488	237,440	133,000	4,536			78,463	
1918	118,028	814,520	94,640	13,944	9,632			68,527	
1919	123,499	217,840	32,088	1,400	4,816			9,801	
1920	113,133	59,248	12,040	2,800	2,912			19,327	
1921	119,053	273,840	51,184	10,528	1,624			31,101	
1922	97,223	173,208	45,606	4,760	56			74,705	
1923	148,711	173,936	46,536	280				32,543	12
1924	155,001	271,432	64,568	5,096	1,120			35,525	155,756
1925	203,270	403,256	59,976	5,432	616			37,824	112,302
1926	267,404	445,088	36,400	728	672			44,508	46,885
1927	211,519	469,448	28,280	392				40,942	49,469
1928	213,630	346,864	25,368	392	504			56,795	79,576
1929	268,045	548,912	20,720	448				53,884	53,036
1930	235,797	553,096	37,296	11,048	1,848	1,274		21,601	65,535
1931	187,790	137,424	36,008	357,560	1,568	10,072	5,768	19,302	30,344
1932	161,295	271,488	28,336	12,208	18,592	11,146	4,235	15,072	20,377
1933	117,939	325,808	31,360	31,584	336	8,943	5,544	6,772	30,265
1934	174,031	580,269	140,848	252,519	2,663	26,577	9,568	7,491	23,797
1935	195,266	1,086,392	269,361	573,413	3,099	13,699	5,317	1,190	28,247
1936	179,123	1,782,205	372,421	718,789	3,716	24,403	6,790	8,092	678
1937	208,071	2,029,560	387,312	651,457	3,673	25,493	3,508	12,248	963
1938	166,722	1,110,331	206,625	339,066	2,689	26,577	2,007	27	456
1939	163,223	1,912,868	183,411	307,742	3,432	35,399	2,344	26,207	1,254
1940	198,929	1,059,019	186,408	314,371	2,383	45,786	3,266	13,801	12,644
1941	225,349	1,307,455	231,065	373,997	2,527	53,400	1,831	2,365	18,563
1942	286,174	2,236,469	333,155	384,190	114,806	71,259	1,988	2,859	25,907
1943	183,039	2,707,530	558,854	117,008	2,370,391	78,299	3,287	3,574	37,136
1944	263,889	320,126	727,290	217,988	6,393,230	94,467	4,918	8,680	70,030
1945	242,786	1,600,028	962,002	651,649	6,464,941	91,621	2,766	57,949	97,106
1946	117,520	1,379,401	537,373	463,822	1,968,362	103,306	2,374	152,899	648,435
1947	73,382	2,651,731	455,336	237,166	148,398	106,457	2,880	222,581	983,732
1948	178,502	1,583,653	344,099	368,989	617,559	109,245	4,909	249,189	274,026

<sup>1</sup> Conversion factor used was 56 pounds per bushel when reported in bushels.

<sup>2</sup> Wheat, barley, rice, sorghum grain, etc., also mixtures of corn, malt, and rye.

<sup>3</sup> Diamalt, sulphite liquor, manioc meal, maguey juice, maple sirup, cider, corn sirup, potatoes, crude-alcohol mixture, cellulose pulp, and chemical mixtures, etc.

<sup>4</sup> Average for 4 years.

<sup>5</sup> Average for 3 years.

<sup>6</sup> 1930 figure.

Source: Treasury Department: 1901 to 1933, Bureau of Industrial Alcohol; Statistics Concerning Intoxicating Liquors. 1934 and subsequent years, Bureau of Internal Revenue; annual and special reports.

No. 1035.—DENATURED ALCOHOL:<sup>1</sup> 1910 TO 1948

YEAR ENDING JUNE 30—	Alcohol produced at industrial alcohol plants <sup>2</sup>	Denaturing plants operated	Ethyl alcohol used for denaturation <sup>3</sup>	DENATURED ALCOHOL PRODUCED <sup>4</sup>		
				Total	Completely denatured	Specially denatured
1910			Proof gallons	Wine gallons	Wine gallons	Wine gallons
1915			12	10,605,871	6,079,027	3,076,925
1920			23	25,411,719	13,986,469	5,386,647
1925	18,953,551	52	45,640,049	28,836,350	13,528,402	8,599,822
1926	166,165,518	91	152,254,039	81,808,273	46,983,970	34,824,303
1930	193,823,717	68	185,000,827	106,776,978	59,063,510	47,713,408
1935	180,645,920	39	105,233,066	97,031,074	38,746,679	55,284,395
1940	243,727,756	40	225,160,792	126,761,880	15,352,033	111,409,707
1943	5,447,736,568	76	403,303,779	222,894,419	24,309,788	198,524,631
1944	636,575,216	66	673,439,556	524,113,586	52,331,761	471,713,826
1945	683,431,944	65	971,446,910	527,095,537	33,087,533	494,008,004
1946	329,356,962	50	393,458,500	212,802,110	26,144,437	186,657,673
1947	248,798,639	49	338,029,989	183,744,086	36,395,715	147,348,371
1948	332,282,148	48	330,651,745	184,281,826	34,887,780	149,394,037

<sup>1</sup> Includes data for Hawaii for all years and data for Puerto Rico beginning with Aug. 1, 1928.<sup>2</sup> Separate accounts for alcohol produced at industrial alcohol plants required commencing May 1, 1920.<sup>3</sup> Through 1930, represents withdrawals, including rum and spirits produced at distilleries for denaturation. 1935 and 1940, represents withdrawals of all products for denaturation, that is, domestic ethyl alcohol spirits produced by registered distilleries (redesignated upon receipt at denaturing plants as alcohol), and rum. Beginning 1943, represents all products (except rum) used for denaturation, that is, domestic ethyl alcohol, imported ethyl alcohol, and spirits.<sup>4</sup> Prior to 1943 includes denatured rum.<sup>5</sup> Represents gross production. Net production (gross production minus products used in redistillation) for such years follows: 1943, 364,698,976; 1944, 590,929,045; 1945, 650,089,874.

Source: Treasury Department, Bureau of Internal Revenue; Annual Report of the Commissioner.

## No. 1036.—ALCOHOLIC BEVERAGES—PRODUCTION, TAX-PAID WITHDRAWALS, AND STOCKS: YEARS ENDING JUNE 30, 1942 TO 1948

[Includes data for Alaska, Hawaii, and Puerto Rico. See also *Historical Statistics*, series J 172 for production of fermented malt liquor]

CLASS	UNIT	1942	1943	1944	1945	1946	1947	1948
Fermented malt liquor:								
Production	Thous. of bbl. <sup>1</sup>	63,717	71,018	81,726	88,604	84,978	87,857	91,291
Tax-paid withdrawals	do	60,856	68,636	76,970	79,591	81,287	82,029	86,903
Stocks on hand June 30	do	8,935	8,286	8,862	9,262	8,035	9,505	9,888
Distilled spirits, total:								
Production <sup>2</sup>	Thous. of tax gal. <sup>3</sup>	157,982	39,917	23,805	128,205	275,148	315,156	244,127
Tax-paid withdrawals	do	144,208	136,837	90,404	142,331	178,131	173,505	147,160
Stocks on hand June 30 <sup>2</sup>	do	587,751	476,345	376,278	338,173	420,202	525,828	594,733
Whiskey:								
Production	do	120,257	19,530		41,562	147,465	167,905	129,597
Tax-paid withdrawals	do	84,709	87,914	58,833	63,801	63,227	58,823	53,603
Stocks on hand June 30	do	516,019	424,825	348,046	307,588	374,072	404,828	322,261
Rectified spirits and wines, production, total	Thous. of proof gal.	67,771	70,125	67,686	118,863	150,879	148,560	125,733
Whiskey, production	do	55,902	60,795	57,862	101,645	124,727	130,701	114,917
Still wines: <sup>6</sup>								
Production <sup>7</sup>	Thous. of wine gal. <sup>8</sup>	313,706	195,225	264,853	314,983	379,936	515,335	314,328
Tax-paid withdrawals	do	102,016	108,426	84,673	88,792	107,965	102,212	110,114
Stocks on hand June 30 <sup>9</sup>	do	133,195	91,031	94,313	102,725	102,014	100,211	147,708
Sparkling wines: <sup>10</sup>								
Production	Thous. of half pints <sup>11</sup>	24,582	20,348	30,192	31,017	40,500	48,548	20,422
Tax-paid withdrawals	do	17,560	22,071	26,961	25,269	35,721	30,985	20,414
Stocks on hand June 30	do	20,992	17,048	18,715	22,634	24,498	30,401	36,465

<sup>1</sup> Barrels of not more than 31 wine gallons. <sup>2</sup> Excludes ethyl alcohol.<sup>3</sup> A tax gallon for spirits of 100 proof or over is equivalent to the proof gallon. For spirits of less than 100 proof the tax gallon is equivalent to the wine gallon.<sup>4</sup> Excludes high-proof spirits and unfinished spirits produced at registered distilleries for industrial purposes.<sup>5</sup> Includes ethyl alcohol.<sup>6</sup> Excludes vermouth.<sup>7</sup> Production represents total amount removed from fermenters, including distilling material (substandard wines produced with excessive water or residue materials). In 1948, 208,903,247 gallons of distilling materials were produced.<sup>8</sup> Standard United States gallon.<sup>9</sup> Excludes distilling materials.<sup>10</sup> Includes champagne, other sparkling wines, and artificially carbonated wines.<sup>11</sup> Tax is payable on each  $\frac{1}{2}$  pint or fraction thereof in each bottle or container.

Source: Treasury Department, Bureau of Internal Revenue; Annual Report of the Commissioner.

**NO. 1037.—DISTILLED SPIRITS, MALT LIQUORS, AND WINES—APPARENT AVERAGE ANNUAL PER CAPITA CONSUMPTION IN THE CONTINENTAL UNITED STATES: 1850 TO 1948**

[In gallons, except distilled spirits which is shown in tax gallons]

FISCAL YEAR	DISTILLED SPIRITS			MALT LIQUORS			WINES		
	Total	Domestic	Im-ported	Total	Domestic	Im-ported	Total	Domestic	Im-ported
1850.....	2.24	2.02	0.22	1.58	1.57	0.01	0.27	0.01	0.26
1860.....	2.86	2.67	.19	3.22	3.18	.04	.34	.06	.28
1870.....	2.07	1.89	.18	5.31	5.28	.03	.32	.08	.24
1871-80 <sup>1</sup> .....	1.39	1.35	.04	6.98	6.90	.08	.47	.31	.16
1881-90 <sup>1</sup> .....	1.34	1.31	.03	11.37	11.34	.03	.48	.39	.09
1891-95 <sup>1</sup> .....	1.37	1.35	.02	15.20	15.15	.05	.39	.32	.07
1896-1900 <sup>1</sup> .....	1.12	1.10	.02	15.53	15.49	.04	.36	.31	.05
1901-05 <sup>1</sup> .....	1.39	1.36	.03	17.34	17.29	.05	.47	.40	.07
1906-10 <sup>1</sup> .....	1.43	1.39	.04	19.81	19.73	.08	.62	.53	.09
1911.....	1.46	1.42	.04	20.69	20.61	.08	.67	.60	.07
1912.....	1.45	1.41	.04	20.02	19.95	.07	.53	.52	.06
1913.....	1.51	1.47	.04	20.72	20.64	.08	.56	.49	.07
1914.....	1.44	1.40	.04	20.68	20.62	.07	.53	.46	.07
1915.....	1.26	1.23	.03	18.40	18.37	.03	.33	.27	.06
1916.....	1.37	1.33	.04	17.78	17.76	.02	.47	.42	.05
1917.....	1.62	1.59	.03	18.17	18.15	.02	.41	.36	.05
1918.....	.87	.86	.01	14.77	14.76	.01	.49	.46	.03
1919.....	.79	.79	(2)	8.00	8.00	(2)	.51	.49	.02
1920.....	.22	.22	(2)	2.61	2.61	(2)	.12	.12	(2)
1921.....	.32	.32	(2)				.19	.18	.01
1922 <sup>2</sup> .....	.18	.18	(2)				.06	.05	.01
1923 <sup>2</sup> .....	.11	.11	(2)				.13	.13	(2)
1924 <sup>2</sup> .....	.10	.10	(2)				.08	.08	(2)
1925 <sup>2</sup> .....	.09	.09	(2)				.03	.03	(2)
1926 <sup>2</sup> .....	.09	.09	(2)				.05	.05	(2)
1927 <sup>2</sup> .....	.08	.08	(2)				.04	.04	(2)
1928 <sup>2</sup> .....	.09	.09	(2)				.04	.04	(2)
1929 <sup>2</sup> .....	.09	.09	(2)				.09	.09	(2)
1930 <sup>2</sup> .....	.08	.08	(2)				.03	.03	(2)
1931 <sup>3</sup> .....	.07	.07	(2)				.05	.05	(2)
1932 <sup>3</sup> .....	.06	.06	(2)				.04	.04	(2)
1933 <sup>3</sup> .....	.05	.05	(2)	1.56	1.55	.01	.01	.01	(2)
1934 <sup>3</sup> .....	.33	.30	.03	7.90	7.89	.01	.14	.12	.02
1935.....	.70	.67	.03	10.45	10.44	.01	.30	.28	.02
1936.....	.81	.73	.08	11.93	11.92	.01	.39	.37	.02
1937.....	1.03	.90	.13	13.47	13.45	.02	.52	.49	.03
1938.....	1.00	.89	.11	13.02	13.00	.02	.51	.48	.03
1939.....	.93	.84	.09	12.41	12.39	.02	.55	.52	.03
1940.....	1.02	.93	.09	12.58	12.57	.01	.66	.63	.03
1941.....	1.04	.96	.08	12.42	12.41	.01	.70	.68	.02
1942.....	1.13	1.06	.07	14.18	14.17	.01	.79	.78	.01
1943.....	1.11	1.00	.11	15.96	15.93	.03	.84	.83	.01
1944.....	1.03	.72	.31	17.97	17.92	.05	.73	.66	.07
1945.....	1.22	1.05	.17	18.86	18.79	.07	.73	.70	.03
1946.....	1.39	1.27	.12	18.56	18.47	.09	.87	.82	.05
1947.....	1.28	1.17	.11	18.08	18.02	.06	.77	.74	.02
1948.....	1.06	.97	.09	18.58	18.56	.02	.79	.77	.02

<sup>1</sup> Average for the period.

<sup>2</sup> Less than .006.

<sup>3</sup> Includes quantities withdrawn for certain manufacturing, compounding, medicinal, and sacramental uses.

Source: Department of Commerce, Office of Domestic Commerce; published in World Trade in Commodities: Foreign Trade in Beverages and Beverage Materials. Data prior to 1922 published in the Statistical Abstract, 1921, p. 616.

## No. 1038.—TOBACCO PRODUCTS—PRODUCTION, BY KIND: 1901 TO 1947

[Compiled from monthly returns of manufacturers. Data relate to products manufactured in continental United States, excluding those manufactured in Customs bonded manufacturing warehouses, class 6. There were 124,055,188 large cigars manufactured in these warehouses in 1947. Large cigars are those weighing more than 3 pounds per thousand. See also *Historical Statistics*, series J 174 for data on cigarettes]

CALENDAR YEAR OR YEARLY AVERAGE	TOBACCO AND SNUFF (THOUSANDS OF POUNDS)						CIGARS (THOUSANDS)		CIGARETTES (THOUSANDS)	
	Total	Plug	Twist	Fine cut	Smok- ing 1	Snuff	Large	Small	Large	Small
	346,841	175,981	11,903	138,402	20,556	6,513,095	716,720	7,143	3,227,606	
1901-1905	346,841	175,981	11,903	138,402	20,556	6,513,095	716,720	7,143	3,227,606	
1906-1910	413,084	167,460	13,524	12,525	192,700	26,845	6,883,272	1,059,501	16,113	6,192,571
1911-1915	437,346	158,529	15,017	10,793	221,865	31,140	7,087,630	1,053,654	15,605	14,802,416
1916-1920	456,584	159,869	14,346	9,758	237,808	34,805	7,364,937	810,327	26,026	41,565,670
1921-1925	409,457	115,445	10,105	6,972	239,151	37,785	6,091,913	557,300	16,704	65,903,991
1926-1930	389,244	99,470	8,374	5,821	235,421	40,159	6,360,650	414,044	10,479	109,361,216
1931-1935	349,785	64,662	5,404	3,600	239,072	36,087	4,648,368	245,412	20,417	121,702,076
1936-1940	344,331	54,402	6,029	4,703	241,561	37,636	5,184,661	164,652	2,956	174,117,549
1941-1945	327,473	56,967	6,223	4,535	217,829	41,919	5,457,472	125,370	23,938	285,475,536
1935	342,728	60,588	5,604	4,682	235,757	36,095	4,685,370	177,822	2,504	130,966,180
1936	347,977	59,165	6,372	5,068	239,349	38,022	5,172,279	180,006	2,458	152,893,058
1937	340,579	58,331	6,774	4,999	233,334	37,141	5,303,369	198,585	3,066	169,989,320
1938	345,369	54,495	6,656	4,572	235,470	37,173	5,014,758	182,990	2,638	171,086,383
1939	343,307	51,263	5,733	4,701	243,640	37,970	5,197,627	186,940	4,309	180,666,824
1940	344,423	48,759	5,605	4,176	248,011	37,872	5,235,271	134,758	2,249	189,371,258
1941	342,427	50,230	5,614	5,060	241,897	39,616	5,610,176	146,711	1,790	217,934,925
1942	330,413	54,300	6,024	5,084	224,002	41,003	5,840,805	133,150	2,503	257,520,863
1943	327,089	58,945	6,257	4,460	214,249	43,179	5,363,027	125,480	6,111	296,172,333
1944	306,935	61,655	6,498	4,092	192,728	41,962	5,198,679	123,340	26,870	323,583,888
1945	330,502	59,704	6,723	3,970	216,271	43,834	5,274,675	98,167	82,416	332,164,070
1946	253,281	51,810	5,773	3,756	152,531	39,361	5,617,700	92,262	1,658	350,038,093
1947	242,283	47,306	5,152	3,793	146,869	39,163	5,487,656	79,690	537	369,682,769

<sup>1</sup> Includes scrap chewing tobacco.

<sup>2</sup> Number of factories on Jan. 1, 1948: Tobacco and snuff (excluding 203 "quasi" manufacturers), 350; cigars, 2,228; cigarettes, 53.

Source: Treasury Department, Bureau of Internal Revenue; Annual Report of the Commissioner.

## No. 1039.—TOBACCO, LEAF—AMOUNTS CONSUMED IN THE MANUFACTURE OF CIGARS, CIGARETTES, CHEWING AND SMOKING TOBACCO, AND SNUFF: 1896 TO 1947

[All figures in thousands of pounds. Figures represent the equivalent in unstemmed leaf tobacco of stemmed leaf or scraps, cuttings, and clippings. In the following table the tobacco used in the manufacture of cigars and cigarettes was converted on the basis of 3 pounds of stemmed leaf or scraps, etc., to 4 pounds of unstemmed beginning 1915 (conversion prior to 1915 was at the ratio of 3 to 5) and of tobacco and snuff beginning 1903. For 1896 to 1902, tobacco used in manufactured tobacco and snuff was shown only under two heads, namely, "leaf" and "scraps." It is probable that stemmed leaf was included with unstemmed tobacco under the head of "leaf" without the one kind being converted to the equivalent in the other. The conversion ratio of 3 to 4 was applied only to "scraps" for these years. Data exclude tobacco used in bonded manufacturing warehouses. See also *Historical Statistics*, series J 171, for annual total consumption]

CALENDAR YEAR OR YEAR- LY AVERAGE	Total	Cigars	Ciga- rettes	Tobacco and snuff	CALENDAR YEAR	Total	Cigars	Ciga- rettes	Tobacco and snuff
1896-1900	359,053	87,851	16,285	254,967	1934	775,530	111,123	375,383	289,024
1901-1905	451,461	124,411	12,444	314,606	1935	775,932	113,742	399,458	262,731
1906-1910	524,193	139,206	22,079	362,908	1936	847,367	126,578	453,327	267,462
1911-1915	578,283	151,890	52,207	374,186	1937	872,924	128,653	479,961	264,309
1916-1920	650,460	155,312	130,320	364,828	1938	865,302	118,751	483,840	262,710
1921-1925	672,077	151,421	198,069	322,588	1939	885,299	122,081	509,133	253,485
1926-1930	672,540	149,240	312,533	300,767	1940	922,716	126,835	585,218	260,663
1931-1935	740,034	112,296	345,985	282,652	1941	1,009,085	136,068	626,842	246,178
1936-1940	878,722	124,700	492,296	261,726	1942	1,131,065	140,679	754,550	235,837
1941-1945	1,182,914	133,383	821,311	228,231	1943	1,228,703	131,896	860,459	236,349
1930	779,806	137,901	347,915	293,990	1944	1,254,541	129,882	920,418	204,241
1931	752,404	127,628	329,962	294,813	1945	1,201,176	128,390	944,280	218,499
1932	690,134	104,268	299,029	286,817	1946	1,306,667	137,539	1,000,938	168,190
1933	710,608	104,699	326,093	270,876	1947	1,355,117	135,388	1,055,594	164,185

Source: Treasury Department, Bureau of Internal Revenue; Annual Report of the Commissioner.

## NO. 1040.—COTTON-SYSTEM SPINDLES, COTTON CONSUMPTION, AND STOCKS

[Statistics for 1915 to 1948 relate to 12 months ending July 31 and those for prior years to 12 months ending Aug. 31. For 1946, 1947 and 1948 spindles in place include all cotton-system spindles in place regardless of fiber spun. Prior to 1946, "in place" figure represents all spindles in place used exclusively for spinning cotton. Consumption and stocks are expressed in running bales, counting round as half bales, except that all figures, 1840 to 1870, inclusive, and foreign cotton for all years are in equivalent 500-pound bales. See also *Historical Statistics*, series J 179-180 for data on active cotton-system spindles in the U. S. and total cotton consumed including linters.]

YEAR	COTTON-SYSTEM SPINDLES (THOUSANDS)					Active cotton spindle hours (millions)	COTTON CONSUMED, EXCLUDING LINTERS (THOUSANDS OF BALES) <sup>2</sup>			
	Total in place	Active <sup>1</sup>			United States	Cotton-growing States	New England	Other States		
		United States	Cotton-growing States	New England						
1840	(3)	2,285	181	1,597	506	(3)	237	71	159	7
1850	(3)	3,998	265	2,959	775	(3)	576	78	431	67
1860	(3)	5,236	324	3,859	1,053	(3)	845	94	567	184
1870	(3)	7,132	328	4,498	1,306	(3)	797	69	551	177
1880	(3)	10,653	4,661	8,632	1,460	(3)	1,570	1,189	1,129	252
1890	(8)	14,334	1,570	10,934	1,880	(8)	2,518	539	1,502	477
1900	(3)	19,472	4,368	13,171	1,933	(3)	3,873	1,523	1,909	440
1910	28,929	23,207	10,494	15,735	2,038	(3)	4,622	2,234	1,995	393
1920	35,834	33,481	15,231	18,287	1,963	(3)	6,420	3,583	2,397	440
1925	37,929	35,032	17,292	15,975	1,765	91,055	6,193	4,220	1,639	335
1930	34,025	31,245	18,586	11,351	1,308	87,515	6,106	4,749	1,143	214
1935	30,093	28,701	18,212	7,763	726	72,526	5,361	4,306	818	237
1940	24,750	23,586	17,641	5,279	666	97,006	7,784	6,647	918	219
1941	24,335	23,389	17,653	5,088	649	111,775	9,722	8,289	1,147	255
1942	23,971	23,608	17,800	5,138	670	131,161	11,170	9,526	1,313	331
1943	23,401	23,429	17,746	5,043	641	129,709	11,100	9,640	1,156	305
1944	23,293	23,019	17,652	4,784	552	118,283	9,043	8,739	950	254
1945	23,128	22,675	17,610	4,511	554	111,898	9,568	8,455	891	222
1946	23,862	21,578	16,869	4,173	536	105,303	9,163	8,074	854	235
1947	23,824	21,383	16,692	4,237	454	114,727	10,025	8,776	968	251
1948	23,798	22,675	17,807	4,429	439	119,017	9,354	8,254	887	213

YEARLY AVERAGE OR YEAR	CONSUMPTION (THOUSANDS OF BALES)						Linters	STOCKS IN CONSUMING ESTABLISHMENTS AT END OF YEAR (THOUSANDS OF BALES)			
	Cotton, excluding linters							Cotton, excluding linters <sup>5</sup>			
	Total	Domestic			Foreign	Linters		Total	Domestic	Foreign	
		Total	Upland	Sea Island				Total	Domestic	Foreign	
1906-1910	4,829	4,680	4,610	64	—	149	7,163	6,731	6,673	58	
1911-1915	5,257	5,051	8,976	75	(6)	206	293	822	738	84	
1916-1920	6,388	6,105	8,034	71	(6)	282	734	1,452	1,352	100	
1921-1925	5,869	5,577	5,531	9	37	292	599	1,033	911	92	
1926-1930	6,735	6,434	6,419	1	15	301	815	1,150	1,050	100	
1931-1935	5,466	5,325	5,311	1	14	140	720	1,116	1,001	55	
1936-1940	6,938	6,799	6,780	2	18	139	836	7,133	7,060	74	
1941-1945	10,301	10,151	10,105	3	42	149	1,399	10,354	10,233	121	
1937	7,950	7,768	7,747	(9)	20	182	819	1,286	1,218	67	
1938	5,748	5,616	5,608	2	6	132	715	10,908	10,521	87	
1939	6,588	6,736	6,714	3	19	122	851	12,483	12,406	76	
1940	7,784	7,655	7,631	3	21	128	1,061	10,094	9,999	95	
1941	9,722	9,576	9,545	3	27	146	1,359	11,851	11,441	140	
1942	11,170	10,974	10,922	4	47	106	1,488	9,900	9,765	135	
1943	11,100	10,930	10,874	6	50	170	1,301	9,792	9,704	88	
1944	9,943	9,829	9,782	3	44	114	1,365	10,159	10,041	118	
1945	9,568	9,448	9,404	1	44	120	1,481	10,339	10,215	124	
1946	9,163	8,966	8,946	1	19	197	1,055	6,746	6,593	153	
1947	10,025	9,765	9,755	1	9	260	984	2,310	2,178	132	
1948	9,364	9,109	9,101	2	5	246	1,156	2,806	2,717	89	

<sup>1</sup> For 1945 and earlier years data represent sum of greatest number of cotton spindles reported by each mill as active at any time during year, regardless of length of time operated. Beginning with 1946, active figure includes all cotton-system spindles active last day of year, regardless of type of fiber spun. On July 31, 1948, there were 21,327,000 spindles active on cotton, 94,000 on synthetics, 401,000 on other fibers and blends, and 1,123,000 idle.

<sup>2</sup> Includes linters for 1840 to 1908. Figures for all years include foreign and domestic cotton.

<sup>3</sup> Not available.

<sup>4</sup> Cotton mills only.

<sup>5</sup> Includes stocks held in public storage and at compresses beginning 1938.

<sup>6</sup> Includes linters for 1906 to 1908. <sup>7</sup> Average, 1909 and 1910.

<sup>8</sup> "Upland" includes "American-Egyptian" beginning 1912 (first year produced). <sup>9</sup> Less than 500 bales.

Source: Department of Commerce, Bureau of Census; annual report, Cotton Production and Distribution.

No. 1041.—COTTON-SYSTEM SPINDEL ACTIVITY, 1946, 1947, 1948, AND COTTON CONSUMPTION, 1944 TO 1948, BY REGION AND STATE

[Years ending July 31. Consumption includes domestic and foreign cotton and is in running bales counting round as half bales, except foreign cotton which is in equivalent 500-pound bales]

REGION AND STATE	COTTON SPINDLES IN PLACE (THOUSANDS) <sup>1</sup>			ACTIVE COTTON SPINDEL HOURS (MILLIONS)			COTTON CONSUMED, EXCLUDING LINTERS (THOUSANDS OF BALES)				
	1946	1947	1948	1946	1947	1948	1944	1945	1946	1947	1948
United States.....	23,862	23,824	23,798	105,368	114,727	119,017	9,943	9,568	9,163	10,025	9,354
Cotton-growing States.....											
New England.....	18,128	18,104	18,354	88,446	95,507	99,564	8,730	8,455	8,074	8,776	8,254
Other States.....	5,125	5,154	4,931	15,230	17,425	17,889	950	891	854	968	887
Alabama.....	609	568	513	1,692	1,795	1,564	254	222	235	281	213
Connecticut.....	1,819	1,788	1,815	9,588	10,291	10,232	1,176	1,164	1,128	1,238	1,106
Georgia.....	501	491	486	1,196	1,299	1,289	62	57	50	65	61
Maine.....	3,177	3,191	3,217	15,814	16,775	17,393	2,045	2,010	1,971	2,116	1,927
Massachusetts.....	602	630	648	1,976	2,648	2,956	153	149	138	165	170
New Hampshire.....	2,789	2,825	2,701	8,714	9,685	9,790	513	485	470	525	476
New York.....	(2)	(2)	(2)	(2)	(2)	(2)	125	112	(2)	(2)	(2)
North Carolina.....	288	305	269	844	944	920	103	91	90	100	90
Rhode Island.....	5,848	5,860	5,927	27,797	29,634	30,619	2,660	2,550	2,382	2,576	2,524
South Carolina.....	862	851	753	2,148	2,430	2,589	95	86	81	96	89
Tennessee.....	562	567	556	2,704	2,974	3,205	222	221	208	214	215
Texas.....	242	230	240	1,058	1,130	1,021	208	191	198	200	155
Virginia.....	646	648	643	2,692	3,200	3,591	231	226	197	221	211
All other States.....	1,004	907	896	3,503	3,619	3,281	312	274	418	481	362

<sup>1</sup> Includes all cotton-system spindles in place regardless of fiber spun.

<sup>2</sup> Included in all other States.

Source: Department of Commerce, Bureau of Census; annual report, Cotton Production and Distribution.

No. 1042.—COTTON AND RAYON MILL MACHINERY—NUMBER OF MACHINES IN POSSESSION, BY KIND, DECEMBER 31, 1947; IN PLACE, BY KIND AND BY REGION AND STATE, FEBRUARY 28, 1942

[Machinery in place is that which is set up in operating position]

REGION AND STATE	Cards	Combs	ROVING MACHINERY				Spinning spindles	Twist-ing spindles	Looms
			Slub-bers	Speeders	Inter-mediate	Jacks			
<b>1947</b>									
United States.....	86,442	9,138	708,061	1,301,375	630,422	397,694	22,720,349	3,513,774	479,106
<b>1942</b>									
United States.....	90,582	7,245	637,529	1,962,868	700,060	524,948	24,185,947	3,427,293	522,127
Cotton-growing States.....									
North Carolina.....	72,141	3,828	524,619	1,493,816	520,330	232,444	18,184,663	2,612,863	363,376
South Carolina.....	24,339	2,591	161,786	539,540	162,410	148,002	5,861,613	1,173,400	85,383
Georgia.....	16,969	499	129,672	491,417	136,000	17,768	5,020,037	364,376	144,770
Alabama.....	15,692	264	124,558	224,347	103,000	9,668	3,154,956	648,122	54,404
Other cotton-growing States <sup>1</sup> .....	8,365	168	72,405	104,520	50,276	18,120	1,813,716	224,414	34,870
New England <sup>2</sup> .....	6,776	306	36,198	133,992	68,644	38,886	1,734,341	202,482	43,949
Massachusetts.....	15,441	3,219	90,686	392,722	156,412	282,780	5,297,814	723,078	117,020
Rhode Island, Connecticut.....	8,671	2,171	46,228	269,876	98,220	195,692	2,992,490	405,150	56,790
Middle Atlantic <sup>3</sup> .....	3,179	798	16,864	71,592	27,412	73,512	1,301,520	204,860	35,029
Midwestern <sup>4</sup> .....	2,618	180	18,308	64,058	20,084	8,212	589,436	87,372	39,483

<sup>1</sup> Includes Arkansas, California, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, Texas, and Virginia.

<sup>2</sup> Includes Maine, New Hampshire, and Vermont, not shown separately.

<sup>3</sup> Includes Delaware, Maryland, New Jersey, New York, and Pennsylvania.

<sup>4</sup> Includes Illinois, Indiana, Michigan, Ohio, and Wisconsin.

Source: Department of Commerce, Bureau of the Census; 1942 data compiled from manufacturers' reports to War Production Board and published in Facts for Industry, Series 32-16-1; 1947 data from Census of Manufactures.

# WOOL MANUFACTURING EQUIPMENT

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## No. 1043.—WOOL MANUFACTURING EQUIPMENT, BY TYPE: 1899 TO 1947

[Represents equipment in possession of wool manufacturing establishments, regardless of condition. 1943 data based on reports of machinery "in place," and include estimates of number in possession but not in place. Data for 1899, 1914, and 1929 exclude mills whose product was valued at less than \$500 in 1899 and 1914, and less than \$5,000 in 1929; 1943 and 1947 include all mills, regardless of size.]

TYPE	1899	1914	1929	1943	1947
Rag pickers <sup>1</sup>	(2)	1,769	1,495	1,346	
Garnetts <sup>1</sup>	(3)	413	437	577	
Cards (sets), except shoddy cards	(2)	(2)	8,831		
Woolen	7,766	6,819	6,610	7,172	
Worsted <sup>1</sup>	(2)	(2)	2,221	5,247	
Combs	1,451	2,425	2,661	2,613	2,528
Spinning spindles, total	3,220,792	4,307,365	4,850,608	3,643,902	3,022,872
Woolen <sup>1</sup>	2,225,893	2,079,626	2,303,297	1,661,818	1,166,042
Worsted	994,899	2,227,739	2,547,401	1,981,084	1,856,830
Twisting spindles, total <sup>1</sup>	442,672	876,783	917,146	798,220	
Woolen	98,252	91,792	95,778	144,030	
Worsted	344,420	784,901	821,368	654,190	
Looms, except carpet and rug <sup>2</sup>	63,294	76,789	69,554	43,210	35,448
Carpet and rug looms	9,796	9,821	10,287	6,557	5,083

<sup>1</sup> Data for 1899, 1914, and 1929 include estimates to provide for these machines in knitting mills. 1929 data also include estimates on number of woolen spinning spindles and worsted cards in knitting mills.

<sup>2</sup> Data not available.

<sup>3</sup> 1943 and other years not strictly comparable. Census of Manufactures for 1899, 1914, 1929, and 1947 called for a report on looms from those mills whose principal products were wool and hair goods while 1943 inquiry covered all mills consuming weaving yarns spun on woolen or worsted spinning spindles. Includes pile fabric looms conforming with these definitions.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports, and Facts for Industry Series M15H.

## No. 1044.—WOOL MANUFACTURING EQUIPMENT IN PLACE, 1943 AND 1947, AND BY REGION AND STATE, 1943

[Machinery in place is that which is set up in operating position]

YEAR, REGION, AND STATE	Worsted combs	Woolen spinning spindles	Worsted spinning spindles	Woolen and worsted looms	WOOL CARPET AND RUG LOOMS	
					Broad	Narrow
<b>1947</b>						
United States	2,511	1,158,905	1,833,962	35,215	2,329	8,354
<b>1943</b>						
United States	2,582	1,653,550	1,957,593	42,213	2,422	3,488
New England	1,804	855,471	1,390,135	25,699	340	669
Connecticut	(1)	127,664	15,192	2,588	(1)	(1)
Maine	(1)	152,343	96,312	3,466		
Massachusetts	1,141	350,318	698,381	10,781		
New Hampshire	(1)	122,071	62,864	2,610		
Rhode Island	560	74,962	497,060	5,336		
Vermont		42,113	20,336	918		
Middle Atlantic	672	414,504	454,330	9,548	1,886	2,577
New Jersey	405	66,956	156,434	2,597	198	291
New York	61	206,966	82,144	2,371	1,216	1,278
Pennsylvania	206	140,573	215,752	4,580	477	1,008
Southern <sup>2</sup>		192,654	58,812	3,557	196	242
North Central <sup>3</sup>	106	160,245	43,436	2,658		
Western <sup>4</sup>		30,676	11,380	751		

<sup>1</sup> Not shown separately to avoid disclosing information for individual establishments.

<sup>2</sup> Ala., Del., Ga., Ky., N. C., S. C., Tenn., Texas, Va., W. Va., Md., and Okla.

<sup>3</sup> Ill., Ind., Iowa, Mich., Minn., Mo., Ohio, and Wis.

<sup>4</sup> Calif., Oreg., Utah, Wash., and Wyo.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports, and Facts for Industry Series M15H.

## No. 1045.—COTTON MANUFACTURES—PRODUCTION BY KIND: 1939 TO 1948

[Data for 1943-46 collected to meet requirements of war agencies; not strictly comparable with Census of Manufactures for 1939]

[In thousands of linear yards]

PRODUCT	1939	1943	1945	1946	1947	1948
Cotton woven goods over 12 inches in width, except tire fabrics, total <sup>1</sup> .....	8,287,249	10,573,294	8,720,550	9,144,413	9,816,395	9,640,854
Cotton duck.....	173,979	550,472	436,513	241,652	206,415	210,046
Narrow sheeting and allied coarse and medium yarn fabrics.....	1,585,034	2,869,511	2,234,800	2,232,578	2,368,084	2,040,004
Print-cloth yarn fabrics.....	2,999,366	3,298,124	2,810,429	2,883,996	3,229,025	3,448,581
Napped fabrics, total.....	451,412	446,781	418,769	455,497	502,303	432,894
Flannel, moleskin and duvetyn <sup>2</sup> .....	313,346	308,348	282,120	294,644	3,369,022	3,347,353
Blankets, except crib, total <sup>3</sup> .....	1,74,774	63,195	41,697	42,498	58,224	40,435
All-cotton, total.....	58,407	58,407	58,390	58,390	58,779	58,779
Not jacquard.....	45,452	(6)	(6)	(6)	(6)	(6)
Jacquard.....	12,965	(6)	(6)	(6)	(6)	(6)
Part-wool (blankets, except all-cotton, containing less than 25 percent, by weight, of wool or similar fibers).....	1 16,367	7 13,872	7 5,307	7 4,574	7 21,445	7 5,254
Jacquard and not jacquard <sup>4</sup> .....	10,750	11,795	16,637	20,621	15,915	22,023
Crib blankets, all cotton.....	(6)					
Crib blankets, all fibers.....						
Blanketing (made for sale as piece goods), all cotton.....	5,507	(6)	(6)	(6)	(6)	(6)
Other napped fabrics.....	47,035	63,443	78,315	97,734	59,232	53,083
Colored yarn cotton goods and related fabrics.....	683,659	696,471	517,831	616,295	751,749	765,144
Fine cotton-goods (all combed or part-combed cotton fabrics, including fabrics having rayon or other synthetic fiber or silk decorations and fine carded goods).....	1,036,206	8 1,335,739	8 1,142,301	8 1,275,542	8 1,312,582	8 1,297,060
Towels, toweling, washcloths, and terry-woven fabrics other than towels.....	482,641	416,695	352,632	414,613	408,606	374,621
Wide cotton fabrics.....	557,475	586,351	493,426	562,335	670,891	630,006
Specialties and all other fabrics.....	317,487	373,150	313,759	461,910	368,650	300,998

<sup>1</sup> All data for fabrics in the gray except 1939 blanket and blanketing data which are for finished fabrics.

<sup>2</sup> Includes cutting and interlining flannels, canton flannels, moleskins, duvetyns and suede.

<sup>3</sup> Moleskins and suedes included with all other napped fabrics.

<sup>4</sup> 1945, 1946 and 1948 data do not include 7,203,000 yards, 9,071,000 yards and 12,667,000 yards respectively of blankets and blanketing produced on woolen and worsted looms. For production of wool-and-cotton mixed blankets containing 25 to 98 percent wool, see table 1049.

<sup>5</sup> Includes a small quantity of cotton and rayon blankets.

<sup>6</sup> Data not available.

<sup>7</sup> Includes blanketing.

<sup>8</sup> Includes fabrics containing 51 percent or more cotton by weight, balance rayon.

Source: Department of Commerce, Bureau of the Census; 1939 and 1947 data from Census of Manufactures; 1943-1946 data compiled from manufacturers' reports to the War Production Board and Civilian Production Administration and published in Facts for Industry Series 32-2; 1948 data published in Facts for Industry Series M15-A.

**No. 1046.—COTTON AND RAYON WOVEN GOODS, BLEACHED, DYED OR PRINTED: 1943 TO 1948**

[In thousands of linear yards. Data cover bleaching, dyeing, and printing of cotton and rayon woven textiles]

PRODUCT	1943	1946	1947	1948
<b>Bleached, dyed or printed goods, total</b>	<b>9,034,432</b>	<b>8,648,290</b>	<b>8,915,147</b>	<b>8,840,437</b>
Cotton	7,403,108	6,922,822	6,944,456	6,779,692
Rayon <sup>1</sup>	1,631,324	1,725,468	1,970,691	2,060,745
<b>Bleached and white finished goods, total</b>	<b>3,900,383</b>	<b>3,578,225</b>	<b>3,814,867</b>	<b>3,529,268</b>
Cotton	3,081,604	3,379,892	3,616,001	3,316,637
Rayon <sup>1</sup>	218,770	198,333	198,866	212,631
<b>Plain dyed and finished goods, total</b>	<b>3,533,410</b>	<b>3,037,150</b>	<b>3,176,320</b>	<b>3,340,402</b>
Cotton	2,479,416	1,871,852	1,757,386	1,819,096
Rayon <sup>1</sup>	1,053,994	1,165,298	1,418,934	1,521,308
<b>Printed and finished goods, total<sup>2</sup></b>	<b>1,600,639</b>	<b>2,032,915</b>	<b>1,923,960</b>	<b>1,970,767</b>
Cotton	1,242,088	1,671,078	1,571,069	1,643,959
Rayon <sup>1</sup>	365,551	361,837	352,891	326,808

<sup>1</sup> Rayon fabrics are defined as fabrics containing 51 percent or more rayon by weight. Rayon means synthetic yarns made by viscose, cuprammonium and cellulose acetate processes. An unknown quantity of fabrics made from nylon and other synthetic fibers are also included in the rayon yardage.

<sup>2</sup> Includes roller, screen, flock and block printed fabrics.

Source: Department of Commerce, Bureau of Census; 1947, reports of Census of Manufactures; 1943-46 and 1948, Facts for Industry Series M15G.

**No. 1047.—PYROXYLIN SPREAD, SHIPMENTS BY TYPE OF GOODS, AND CAPACITY: 1935 TO 1948**

[Based on monthly figures of processors who coat or impregnate fabrics or paper (except shade cloth) with soluble cotton or pyroxylin preparations, either separately or in combination with other materials. "Light" cotton fabrics include sheetings and print cloths; "Heavy" cotton fabrics include drills, ducks, sateens, brokets, twills, and moleskins]

[Quantity and value figures in thousands]

YEARLY AVERAGE OR YEAR	Number of establishments	Pyroxylin spread (pounds)	SHIPMENTS								Capacity (linear yards) <sup>1</sup>	
			Light cotton fabrics		Heavy cotton fabrics		Custom coating		Nonfibrous material <sup>2</sup>			
			Linear yards	Value	Linear yards	Value	Linear yards	Value	Linear yards	Value		
1935-39	21	58,851	33,828	\$8,114	22,132	\$11,865	(3)	(3)	(3)	(3)	87,851	
1940	21	59,656	33,986	7,932	26,652	13,117	(3)	(3)	(3)	(3)	87,611	
1941	21	82,331	48,112	12,450	39,945	20,420	(3)	(3)	(3)	(3)	87,443	
1942	21	68,300	37,385	11,510	28,297	16,426	(3)	(3)	(3)	(3)	87,515	
1943	21	49,444	34,311	8,186	25,464	15,577	(3)	(3)	(3)	(3)	94,415	
1944	21	54,882	38,750	12,434	26,747	15,496	(3)	(3)	(3)	(3)	97,759	
1945	29	50,941	34,532	11,355	17,453	11,825	4 22,632	4 \$4,928	2,378	\$592	(pounds)	
1946	28	79,208	48,336	19,862	27,554	21,303	4 23,602	4 6,508	4,762	1,716	185,526	
1947 <sup>3</sup>	45	72,106	38,407	20,408	30,923	20,421	23,234	5,485	6,243	3,275	202,724	
1948 <sup>4</sup>	45	53,205	28,211	16,121	19,926	19,537	17,370	2,874	4,144	2,166	218,332	
											230,213	

<sup>1</sup> Data not collected prior to January 1945.

<sup>2</sup> Based on maximum quantity of 1.27 to 1.30 sateen coated to a finished weight of 17½ ounces per linear yard, in a month of 350 working hours.

<sup>3</sup> Data for "Custom coating" included with "Light cotton fabrics" and "Heavy cotton fabrics."

<sup>4</sup> Data for "Fabrics other than cotton" included with "Custom coating" to avoid disclosing data for individual establishments.

<sup>5</sup> Based on all machines suitable for pyroxylin coating, assuming 600 working hours per month and entire production on 53"—1.32 sateen coated to a finished weight of 17½ ounces per linear yard assuming 40 percent solids. No comparative data available from 1935 to 1944.

<sup>6</sup> Data for 1947 and 1948 represent more complete coverage than obtained in prior years. Pyroxylin spread in 1947, on a basis comparable to prior years, amounted to 66,158,000 pounds.

Source: Department of Commerce, Bureau of the Census; 1935-46, Facts for Industry Series M15F; 1947, reports of Census of Manufactures; 1948, compiled with assistance of Plastic Coating and Film Association.

## No. 1048.—RAYON BROAD WOVEN FABRICS—PRODUCTION, BY TYPE: 1944 TO 1948

[Data cover production of rayon broad woven fabrics containing by weight 51 percent or more rayon. Fabrics containing 25 percent or more wool by weight, however, are classed as woolen mixtures and are not included]

[In thousands of linear yards]

PRODUCT	1944	1945	1946	1947	1948
<b>Rayon broad woven fabrics, total<sup>1</sup></b>	<b>1,602,633</b>	<b>1,552,105</b>	<b>1,713,364</b>	<b>1,976,835</b>	<b>2,160,480</b>
<b>100 percent filament rayon fabrics, total</b>	<b>1,103,210</b>	<b>1,028,708</b>	<b>1,048,965</b>	<b>1,236,805</b>	<b>1,337,997</b>
Flat fabrics, total	658,398	599,655	555,187	652,252	722,927
Bright viscose taffetas	48,724	44,266	46,426	50,828	49,393
Pigment viscose taffetas	81,452	76,349	76,625	103,706	135,519
Acetate taffetas	86,446	85,721	77,712	76,516	112,934
Cross-dyed taffetas	21,113	21,800	23,031	13,281	12,205
Rayon parachute fabrics	76,173	62,023	(2)	(2)	(2)
Jersey weaves	5,364	5,998	9,807	5,559	(2)
Sand weaves	15,959	15,267	(2)	(2)	(2)
Sharkskins	(2)	(2)	9,311	15,530	14,102
Twills and serges	137,462	104,487	128,266	169,325	171,301
Viscose satins	17,758	16,875	16,280	26,331	23,628
Acetate satins	119,332	113,167	114,973	142,254	151,712
All other flat fabrics	48,555	53,702	51,696	48,922	52,043
<b>Twisted yarn fabrics, total</b>	<b>444,812</b>	<b>429,053</b>	<b>493,778</b>	<b>584,553</b>	<b>615,070</b>
Crepe satins	19,382	21,029	25,675	28,258	29,447
Flat crepes	72,246	30,965			
Faile	(2)	31,044	87,735	111,964	138,500
Canton crepes	8,522	9,828			
French crepes	84,708	84,905	98,235	119,856	127,354
Plied yarn fabrics, plain weave	148,197	135,488	82,220	118,393	136,855
Plied yarn fabrics, fancy weave			52,873	46,422	34,901
Marquisettes	39,205	44,297	55,417	57,959	49,315
Ninons and voiles	39,338	38,012	41,445	39,082	33,416
Othersheers (georgettes, triple sheers, etc.)	33,124	33,595	37,832	49,806	54,165
All other twisted yarn fabrics	(2)	(2)	11,346	12,723	10,967
<b>100 percent spun rayon fabrics, total</b>	<b>156,141</b>	<b>161,996</b>	<b>191,606</b>	<b>332,451</b>	<b>375,347</b>
Twills (including serges, gabardines, etc.)			33,923	86,420	117,574
Ribbed and corded fabrics (poplins, bedford cord, etc.)	82,505	70,130	3,450	(3)	(3)
Challis			18,700	59,974	39,618
Linen type flakes	23,766	25,385	22,825	25,672	33,600
Plied yarn fabrics	17,895	21,409	49,326	55,860	53,888
All other 100 percent spun rayon fabrics	31,975	39,072	63,382	104,516	130,577
<b>Combination filament and spun rayon fabrics, total</b>	<b>154,398</b>	<b>159,100</b>	<b>172,609</b>	<b>178,982</b>	<b>257,192</b>
Poplins and failles	38,634	34,323	42,999	46,350	49,614
Shantungs	27,837	23,024	22,111	23,750	34,171
Fujis	47,912	61,137	65,832	66,440	52,900
All other filament and spun rayon	39,815	40,616	21,667	21,442	75,507
<b>Pile, upholstery, drapery, tapestry, and tie fabrics, total<sup>5</sup></b>	<b>29,226</b>	<b>31,842</b>	<b>46,398</b>	<b>57,060</b>	<b>41,714</b>
Velvets, plushes and other pile fabrics	8,345	8,134	9,535	14,587	11,397
Upholstery, drapery, and tapestry fabrics	4,154	5,042	15,962	21,273	12,471
Yarn-dyed tie fabrics			14,394	13,282	9,222
Non-yarn-dyed tie fabrics	16,727	18,666	6,507	7,918	8,624
<b>All other rayon mixtures, total</b>	<b>159,658</b>	<b>170,459</b>	<b>253,786</b>	<b>171,537</b>	<b>148,230</b>
Rayon and wool			39,225	33,038	31,041
Filament rayon and cotton	24,921	27,921	81,744	55,279	61,901
Spun rayon and cotton	96,488	97,621	83,812	48,360	37,985
Rayon and other fibers	38,240	44,917	49,005	34,860	17,213
<b>Silk, nylon, glass, and other fabrics, total<sup>6</sup></b>	<b>83,920</b>	<b>67,368</b>	<b>61,829</b>	<b>61,673</b>	<b>87,570</b>
<b>100 percent nylon fabrics</b>	<b>64,390</b>	<b>43,382</b>	<b>21,539</b>	<b>21,881</b>	<b>32,642</b>
100 percent silk fabrics	1,650	1,891	7,9,533	9,986	7,18,880
Other woven fabrics, not classified above	17,871	22,095	30,757	29,806	36,048

<sup>1</sup> Includes estimated production for a few mills not reporting; estimates distributed by fabric classification.

<sup>2</sup> Included in "All other flat fabrics."

<sup>3</sup> Included with "All other 100 percent spun rayon fabrics" to avoid disclosing data for individual establishments.

<sup>4</sup> Includes bengalines, etc.

<sup>5</sup> Fabrics containing 51 percent or more rayon by weight, without separation as to type of yarn used; includes filament rayon, spun rayon and mixtures of rayon and other fiber.

<sup>6</sup> Includes fabrics made of cascina, other synthetic fibers and mixtures of rayon and other fibers containing less than 51 percent of rayon.

<sup>7</sup> Includes small amount of silk mixtures.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports, and Facts for Industry Series M15C.

No. 1049.—WOOLEN AND WORSTED MANUFACTURES—PRODUCTION, BY KIND,  
1939 TO 1948

Woolen and worsted woven goods defined as fabrics containing by weight 25 percent or more wool fiber. Wool fiber means fibers as defined by Wool Products Labeling Act of 1939. Data beginning with 1944 not strictly comparable with those published in Census of Manufactures for 1939. Detailed information on military fabrics required by war agencies, and in most cases, collected by type of fabric rather than by end use. Consultations with military agencies provided basis for estimating end use of each type of fabric. Estimates occurred primarily in men's wear fabrics, and involved less than 15 percent of total apparel fabrics produced. Production figures of women's and children's wear fabrics collected by weight of fabric instead of end use. In Census of Manufactures for 1939 data collected from this industry on a square-yard basis; present series requires reporting of linear yards, with narrow fabrics converted to a 54-inch width. 1939 data converted to a 54-inch linear yard measure by dividing quantity of square yards by 1½, excepting blankets which were converted to a 72-inch linear yard measure by dividing quantities of square yards by 2.

PRODUCT	1939	1944	1945	1946	1947	1948
Thousands of linear yards <sup>1</sup>						
Woven goods (except woven felts)	371,848	527,995	493,431	603,718	500,478	496,268
Apparel fabrics <sup>2</sup>	321,008	440,680	401,434	524,286	436,532	436,210
Men's wear	178,856	217,778	204,191	228,114		
Men's wear suitings and pantings	149,788	163,735	151,128	188,098		
Men's wear shirtings	1,880	21,194	25,227	18,313		
Men's wear overcoatings and topcoatings	27,188	32,810	27,841	21,703		
Women's and children's wear <sup>3</sup>	107,080	170,467	141,443	234,021		
Weighing up to 8.9 ounces	(4)	37,123	21,992	42,872		
Weighing 9-12.9 ounces	(4)	70,140	78,151	127,477	(6)	(6)
Weighing over 18 ounces	(4)	57,204	41,300	64,572		
General use fabrics	25,668	47,064	48,100	51,627		
Melton, mackinaw, snow and ski suit cloths	8,892	15,978	17,278	17,933		
Lining and interlinings	6,204	22,358	23,682	20,188		
Bathrobe flannels	10,572	8,728	7,160	13,806		
Other apparel fabrics	9,404	5,371	7,700	9,024		
Nonapparel fabrics (except woven felts)	50,840	87,315	91,997	79,432	63,946	60,058
Blankets	19,576	78,887	80,167	48,457	31,571	21,275
98 percent or more wool or similar animal fibers	(4)	52,713	52,894	18,494		
50 percent but less than 98 percent wool or similar animal fibers	(4)	7,381	7,778	10,775	(6)	(6)
25 percent but less than 50 percent wool or similar animal fibers	(4)	18,793	19,495	19,188		
Drapery and upholstery fabrics	5,688	4,162	7,817	28,631	28,932	33,845
Bunting	(4)	1,499	(7)	(7)	(7)	(7)
Other nonapparel	25,576	2,767	4,013	2,344	3,443	4,938
Thousands of pounds						
Papermakers' felts	5,164	5,643	5,819	6,590	7,238	7,186
Other woven felts	1,576	3,655	3,182	3,331	3,481	3,157

<sup>1</sup> Measure used in 1939 was square yards; data converted to a 54-inch linear yard measure, excepting blankets which have been converted to a 72-inch linear yard measure. Data for 1944-47 on narrow fabrics converted by reporting companies to a 54-inch linear yard measure.

<sup>2</sup> Includes data for military fabrics reported by types. Estimates as to end use classification made on less than 15 percent of total quantity of apparel fabrics.

<sup>3</sup> Data for 1939 collected as to end use; 1944-46 data collected by weight of fabric.

<sup>4</sup> Data not available.

<sup>5</sup> Data not collected on same basis.

<sup>6</sup> An unknown quantity of these fabrics included in women's and children's wear.

<sup>7</sup> Included in "Other nonapparel."

Source: Department of Commerce, Bureau of the Census; 1939 and 1947 from Census of Manufactures; 1944-46 compiled from manufacturers' reports to War Production Board and Civilian Production Administration. Published in Facts for Industry Series M15H.

No. 1050.—KNIT GOODS: CLOTH, UNDERWEAR, AND OUTERWEAR—PRODUCTION<sup>1</sup>  
BY TYPE: 1947

PRODUCT	Unit	Amount, 1947
Knit cloth for sale, total	Million pounds	150.2
Warp knit fabrics	do	41.5
Circular knit fabrics	do	108.7
Knit underwear and nightwear:		
Made from warp knit fabrics, all fibers	Thousand dozens	7,708
Made from circular knit fabrics:		
Rayon, silk, and synthetics	do	10,932
Cotton and wool	do	40,557
Knit outerwear:		
Sweaters, jackets, and jerseys	do	6,630
Bathing suits and trunks	do	500
Knit headwear and neckwear	do	1,556

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

No. 1051.—WOMEN'S, MISSES', AND JUNIORS' OUTERWEAR: 1939 AND 1947

TYPE OF GARMENT	Unit of measure	GARMENTS CUT	
		1939	1947
Women's and misses' blouses	Thousand dozens	2,886	7,514
Women's and misses' unit price dresses	Thousand units	194,383	{ 127,791
Women's and misses' dozen price dresses	do		75,402
Women's and misses' suits	do	4,237	14,434
Women's and misses' skirts	Thousand dozens	1,084	2,020
Women's and misses' untrimmed coats	Thousand units		{ 18,956
Women's and misses' fur-trimmed coats	do	17,428	1,924

Source: Department of Commerce, Bureau of Census; 1947 Census of Manufactures reports.

No. 1052.—MEN'S AND BOYS' CLOTHING—SELECTED GARMENTS CUT: 1937 TO 1948

[Leaders indicate comparable data not available]

TYPE OF GARMENT	Unit	1937	1939	1946	1947	1948
Suits	Thousand units	23,743	27,354	27,053	28,882	26,050
Men's and youths'	do	20,733	24,737	24,078	26,428	23,933
Boys'	do	3,010	2,617	2,975	2,454	2,117
Separate trousers	do			68,114	60,998	52,778
Separate coats	do			8,033	5,286	6,272
Men's and youths'	do			6,977	4,760	5,504
Boys'	do			1,056	526	708
Dress and sport shirts, men's and youths'	Thousand dozens	12,027	13,362	13,878	17,057	16,396
Overalls	do	4,114	3,973	5,616	6,807	7,241
Men's and youths'	do			3,219	4,241	4,270
Boys'	do			2,397	2,566	2,971
Work shirts (includes flannel)	do	6,062	6,850	7,145	5,814	5,118
Men's and youths'	do			6,350	4,958	4,053
Boys'	do			786	850	465

<sup>1</sup> Includes polo, tennis, and basque shirts of knitted fabrics.

Source: Department of Commerce, Bureau of the Census; published in Facts for Industry Series M67B.

## HOSEIERY AND FOOTWEAR

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## No. 1053.—HOSEIERY—PRODUCTION, BY TYPE: 1943 TO 1948

[In thousands of dozens of pairs]

TYPE	1943	1944	1945	1946	1947	1948
Total, all types.....	149,282	141,435	135,841	157,383	149,545	147,027
Women's full-fashioned, total.....	37,998	36,595	34,740	40,323	38,875	44,706
All-silk.....	12	1	(1)	1,602	687	123
Silk leg, with cotton or rayon welt.....	45	6		387	411	280
All-nylon.....	4		2,697	23,319	31,622	41,778
Nylon leg, with cotton or rayon welt.....	17	2	359	3,078	1,872	1,089
All-rayon.....	27,126	25,991	24,061	7,575	2,802	986
Rayon leg, with cotton welt.....	8,357	10,301	7,383	3,826	1,117	253
Cotton.....	1,814	210	162	347	300	143
All other yarns, and mixtures.....	622	83	78	189	84	54
Seamless, total (incl. men's full-fashioned).....	111,284	104,840	101,100	117,060	110,669	102,321
Women's seamless.....	13,043	9,462	7,420	9,832	11,246	8,517
Men's full-fashioned.....	62	99	118	171	129	105
Men's seamless half-hose.....	36,766	36,204	35,030	26,734	24,662	16,131
Silk.....	36	1		69	19	21
Nylon.....			6	230	450	295
Rayon.....	10,752	9,124	8,180	8,566	8,634	6,140
Cotton.....	18,755	15,914	14,875	13,182	12,156	7,953
Wool.....	7,222	11,165	11,969	4,687	3,401	1,722
Men's slack socks.....	15,724	12,608	13,564	21,885	21,911	25,939
Silk.....	(2)	(2)	(2)	40	49	33
Nylon.....	(2)	(2)	(2)	140	648	828
Rayon.....	(2)	(2)	(2)	6,491	8,143	9,444
Cotton.....	(2)	(2)	(2)	12,007	11,657	14,609
Wool.....	(2)	(2)	(2)	3,206	1,414	1,025
Cotton bundle goods.....	5,693	5,902	5,248	5,216	5,627	6,077
Woolen bundle goods.....	3,083	3,267	3,704	2,104	1,830	1,747
Athletic socks.....	1,164	1,192	847	2,302	1,610	1,806
Crew socks.....	(2)	(2)	(2)	3,528	3,239	2,785
Children's and infants'.....	4,546	5,224	6,281	8,150	8,221	8,408
Anklets, total.....	31,202	30,882	28,588	37,138	32,195	30,806
Misses' and women's.....	22,615	20,637	18,816	25,012	16,680	13,449
Men's and boys'.....	1,797	1,952	1,986	3,015	3,673	3,382
Children's.....	(2)	(2)	(2)	(2)	5,809	6,750
Infants'.....	6,790	8,294	8,085	9,111	6,033	7,225

<sup>1</sup> Less than 500 dozens.<sup>2</sup> Not available.<sup>3</sup> Included with men's slack socks.

Source: National Association of Hosiery Manufacturers, New York, New York; published annually in Hosiery Statistics.

## No. 1054.—FOOTWEAR, EXCEPT HOUSE SLIPPERS AND RUBBER FOOTWEAR—PRODUCTION BY CLASS: 1939 AND 1947

[In thousands of pairs]

CLASS	1939	1947
Total.....	385,596	437,312
Dress and work shoes.....	361,578	398,084
Men's dress, including moccasin type dress shoes.....	76,637	84,957
Men's work, including moccasins.....	28,125	21,786
Youths' and boys'.....	17,316	19,829
Women's, including sandal type dress shoes.....	168,777	182,816
Misses', including sandal type dress shoes.....	46,091	27,026
Children's.....	24,032	26,262
Infants'.....	4,144	30,906
Babies'.....	4,144	14,502
Athletic shoes.....	19,874	4,233
Play shoes.....		31,839
Footwear, not specified by kind.....		3,156

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

## No. 1055.—PRINTING AND PUBLISHING—RECEIPTS, 1937 to 1947, AND CIRCULATION, 1929 TO 1947

CLASS	VALUE (THOUSANDS OF DOLLARS)						
	1937	1939	1947				
	2,303,178	2,309,062	5,711,872				
<b>Aggregate value and receipts<sup>1</sup></b>							
Newspapers and periodicals published							
Newspapers	1,269,523	1,254,714	2,837,861				
Subscriptions and sales	861,688	845,687	1,792,338				
Advertising	287,508	306,192	590,925				
Periodicals	574,180	539,405	1,192,413				
Subscriptions and sales	407,835	409,027	1,045,523				
Advertising	171,961	184,572	410,782				
Books published	235,874	224,455	625,741				
Books and pamphlets <sup>1</sup>	239,128	254,987	608,702				
Books published	159,868	149,380	435,134				
Pamphlets published	8,389	15,000	20,656				
Printed for publication by others <sup>1</sup>	70,871	90,607	153,002				
Greeting cards <sup>1</sup>	2,32,637	44,286	129,207				
Publishers' sales	(3)	28,314	107,716				
Printed for others <sup>1</sup>	(3)	15,972	21,551				
Miscellaneous publishing <sup>4</sup>	(3)	(3)	123,474				
Newspapers, ready prints and periodicals printed for others <sup>1</sup>	85,070	102,586	299,424				
Letterpress	83,145	89,458	258,740				
Lithographing	1,925	1,355	9,384				
Engraving and plate printing	(6)	11,773	270				
Gravure	676,820	652,489	31,021				
Other printing	501,996	488,129	1,713,054				
Letterpress	128,626	144,616	1,176,552				
Lithographing	27,595	13,850	456,092				
Engraving and plate printing	18,603	5,894	49,060				
Gravure			31,360				
<b>AGGREGATE CIRCULATION PER ISSUE (AVERAGE FOR THE YEAR)</b>							
CLASS	1929	1931	1933	1935	1937	1939	1947
Newspapers:							
Daily:							
Morning	15,741,769	15,480,287	14,781,657	15,983,996	17,311,078	17,152,298	25,638,207
Evening	26,273,602	25,813,372	22,848,688	24,886,550	26,033,858	25,813,827	33,503,240
Sunday	29,011,648	27,453,465	25,463,894	29,196,006	32,713,298	33,006,875	43,042,020
Triweekly	287,152	184,380	140,497	120,601	231,365	210,121	151,125
Semiweekly	1,580,221	1,352,720	1,025,567	1,723,630	1,719,820	1,989,744	925,772
Weekly	18,883,551	16,173,234	12,048,317	15,185,366	17,286,731	18,294,604	21,407,500
Periodicals:							
Daily	922,363	830,902	793,936	681,607	790,722	1,070,417	842,414
Triweekly	24,625	31,314	25,206	22,327	32,978	27,152	4,826
Semiweekly	1,401,963	1,284,406	1,810,522	2,129,010	2,556,002	2,004,810	181,031
Weekly	34,494,799	30,781,548	36,365,192	42,648,210	56,115,124	55,825,206	60,302,699
Semimonthly	9,168,458	6,375,456	4,592,507	5,507,019	7,547,644	8,135,260	13,832,402
Monthly	133,048,488	122,670,528	103,192,794	102,193,740	124,520,846	134,766,467	104,823,023
Quarterly	20,605,002	19,575,617	23,237,557	23,277,089	25,808,324	26,238,181	45,535,080
Other classes	2,845,897	1,977,550	1,741,779	2,160,680	6,903,182	9,725,925	60,015,498

<sup>1</sup> The inclusion of "Books and pamphlets printed for publication by others," "Greeting cards printed for others," "Newspapers, ready prints and periodicals printed for others," etc. results in duplication in the aggregate value and receipts, as follows: 1937, \$158,466,000; 1939, \$201,627,000; 1947, \$482,292,000. (No separate data available for greeting cards for 1937.) These amounts represent receipts by commercial printers for work done by them for other printers or for publishers, and consequently enter twice into the aggregate value and receipts.

<sup>2</sup> Includes souvenir cards.

<sup>3</sup> No data.

<sup>4</sup> Includes publication of picture postcards, souvenir cards, sheet music, bluebooks, directories, catalogs, maps, atlases, globe covers, shopping news, and business service publications.

<sup>5</sup> Included with "Other printing, gravure."

Source: Department of Commerce, Bureau of the Census; reports of Census of Manufactures.

## No. 1056.—CHEMICALS—PRODUCTION, BY KIND, 1939 TO 1948

[Data for chemicals shown are restricted to a selected group comprised for the most part of inorganic chemicals and related products which are sufficiently important economically to justify publication. Data for production by Government-owned arsenals, ordnance works, and certain plants operated for Government by private industry are excluded, except that data for chemicals manufactured by Tennessee Valley Authority are included]

CHEMICAL AND BASIS	Unit	1939	1945	1946	1947	1948 <sup>1</sup>
Ammonia, synthetic anhydrous	Short tons	310,822	<sup>2</sup> 548,655	<sup>2</sup> 725,537	<sup>2</sup> 1,117,212	<sup>2</sup> 1,089,786
Ammonium nitrate, original solution (100% NH <sub>4</sub> NO <sub>3</sub> )	do	(*)	421,487	724,899	1,047,702	988,342
Ammonium sulfate, synthetic (technical)	M pounds	(*)	177,726	313,306	394,053	390,878
Calcium arsenate (100% Ca <sub>3</sub> (AsO <sub>4</sub> ) <sub>2</sub> )	do	<sup>5</sup> 41,349	(*)	35,392	47,187	(*)
Calcium carbide (commercial)	Short tons	(*)	672,568	570,138	608,337	682,934
Calcium phosphate:						
Monobasic (100% CaH <sub>4</sub> (PO <sub>4</sub> ) <sub>2</sub> )	M pounds	74,076	62,726	74,986	71,734	72,529
Dibasic (100% CaH <sub>2</sub> PO <sub>4</sub> )	do	(*)	58,031	71,587	77,537	88,291
Carbon, activated	do	32,336	62,577	65,102	71,097	66,031
Carbon dioxide:						
Liquid and gas	do	(*)	236,484	217,241	243,880	244,084
Solid (dry ice)	do	356,894	659,169	644,699	723,165	758,818
Chlorine, gas	Short tons	514,401	1,192,081	1,165,126	1,446,865	1,621,031
Chrome green (C. P.)	M pounds	10,020	9,008	17,871	13,982	12,720
Chrome yellow and orange (C. P.)	do	88,933	94,040	43,122	48,972	49,259
Hydrochloric acid (100% HCl)	Short tons	123,831	407,551	341,580	425,105	443,651
Hydrofluoric acid, anhydrous and technical (100% H <sub>2</sub> F <sub>2</sub> )	M pounds	14,842	86,377	42,921	55,182	67,736
Hydrogen	Mil. cu. ft.	(*)	22,247	17,605	21,936	27,840
Lead arsenate (acid and basic)	M pounds	59,569	70,522	56,667	30,187	(*)
Methanol (natural) (100% CH <sub>3</sub> OH)	M gallons	4,005	2,814	2,306	2,525	2,380
Molybdate chrome orange (C. P.)	M pounds	(*)	2,280	4,896	4,456	5,800
Nitric acid (100% HNO <sub>3</sub> )	Short tons	107,740	447,088	573,827	1,100,060	1,132,819
Oxygen	Mil. cu. ft.	(*)	13,943	10,868	13,793	15,948
Phosphoric acid:						
Total (50% H <sub>3</sub> PO <sub>4</sub> )	Short tons	(*)	730,943	894,615	1,038,414	1,215,937
From phosphorus (50% H <sub>3</sub> PO <sub>4</sub> )	do	(*)	364,850	440,056	555,176	606,251
From phosphate rock (50% H <sub>3</sub> PO <sub>4</sub> )	do	(*)	366,093	454,559	483,238	609,686
Silica gel, desiccant and aviation gas catalyst grades	M pounds		133,973	40,682		
Silver nitrate (100% AgNO <sub>3</sub> )	M ounces	(*)	57,812	47,857	40,232	50,894
Soda ash (commercial sodium carbonate):						
Ammonia soda process						
Total wet and dry (98-100% Na <sub>2</sub> CO <sub>3</sub> ) <sup>10</sup>	Short tons	2,826,000	4,375,017	4,284,231	4,519,144	4,575,452
Finished light (98-100% Na <sub>2</sub> CO <sub>3</sub> ) <sup>11</sup>	do		2,285,532	2,079,959	2,194,395	2,317,575
Finished dense (98-100% Na <sub>2</sub> CO <sub>3</sub> ) <sup>12</sup>	do		1,444,022	1,546,746	1,641,452	1,534,730
Natural (Na <sub>2</sub> CO <sub>3</sub> equivalent) <sup>12</sup>	do		121,858	181,783	209,411	281,132
Sodium bicarbonate (refined) (100% Na-HCO <sub>3</sub> )	do	<sup>13</sup> 150,913	174,949	188,945	181,145	160,915
Sodium bichromate and chromate	do		58,164	80,672	85,490	87,874
Sodium hydroxide (caustic soda): <sup>14</sup>						
Electrolytic process						
Liquid (100% NaOH)	do	512,492	1,120,312	1,129,956	1,386,995	1,587,831
Solid (100% NaOH)	do		213,449	192,952	247,257	303,971
Lime-soda process						
Liquid (100% NaOH)	do	532,914	784,993	742,932	747,247	769,697
Solid (100% NaOH)	do		244,015	226,349	244,992	256,951
Sodium phosphate:						
Monobasic (100% NaH <sub>2</sub> PO <sub>4</sub> )	do	(*)	14,783	11,961	14,214	12,344
Dibasic (100% Na <sub>2</sub> HPO <sub>4</sub> )	do		32,882	62,673	59,328	83,340
Tribasic (100% Na <sub>3</sub> PO <sub>4</sub> )	do		116,731	88,731	94,963	89,055
Meta (100% Na <sub>2</sub> PO <sub>3</sub> )	do	(*)	27,925	26,088	30,662	35,045
Tetra (100% Na <sub>4</sub> P <sub>2</sub> O <sub>7</sub> )	do		48,691	43,447	52,149	56,169
Sodium silicate (soluble silicate glass, liquid and solid) (anhydrous)	do	(*)	410,686	412,357	478,747	483,856
Sodium sulfate:						
Anhydrous (refined) (100% Na <sub>2</sub> SO <sub>4</sub> )	do	(*)	91,340	122,573	135,088	169,018
Glauber's salt (100% Na <sub>2</sub> SO <sub>4</sub> .10H <sub>2</sub> O) <sup>12</sup>	do	(*)	200,782	167,153	197,963	183,630
Salt cake (crude) (commercial) <sup>12</sup>	do	(*)	543,371	527,746	627,331	656,438

For footnotes, see next page.

## No. 1056.—CHEMICALS—PRODUCTION, BY KIND, 1939 TO 1948—Continued

CHEMICAL AND BASIS	UNIT	1939	1945	1946	1947	1948
Sulfuric acid:						
Gross (100% H <sub>2</sub> SO <sub>4</sub> ) <sup>15</sup>	Shorttons	4,795,003	9,522,136	9,319,652	10,574,041	10,950,097
Chamber process (100% H <sub>2</sub> SO <sub>4</sub> )	do	2,120,963	3,169,197	3,099,016	3,325,887	2,961,340
Contact process (gross) (100% H <sub>2</sub> SO <sub>4</sub> ) <sup>16</sup>	do	2,674,040	6,352,939	6,220,636	7,249,054	7,088,757
Contact process (new) (100% H <sub>2</sub> SO <sub>4</sub> ) <sup>15</sup>	do		5,517,873	5,676,232	6,032,711	7,208,744
Fortified spent acid (100% H <sub>2</sub> SO <sub>4</sub> )	do		835,066	844,404	615,343	719,013
Zinc yellow (zinc chromate) (C. P.)	do		12,326	—	3,378	4,752

<sup>1</sup> Preliminary.<sup>2</sup> Includes data for small amount of aqua ammonia reported by 1 company.<sup>3</sup> No comparable data.<sup>4</sup> Excludes byproduct coke-oven production.<sup>5</sup> Proportion of estimate, 5 percent.<sup>6</sup> Not shown separately to avoid disclosure of individual operations.<sup>7</sup> Includes data for deodorizing, decolorizing, and water purification grades. Data for gas-mask solvent recovery grades excluded.<sup>8</sup> Includes data for molybdate chrome orange.<sup>9</sup> About 1 percent of production represents data for pulp colors, and flushed and reduced chrome yellow.<sup>10</sup> Includes quantities diverted to manufacture of caustic soda and sodium bicarbonate and quantities processed to finished light and finished dense soda ash.<sup>11</sup> Excludes quantities converted to finished dense soda ash.<sup>12</sup> Collected in cooperation with Bureau of Mines.<sup>13</sup> Proportion of estimate, 3 percent or less.<sup>14</sup> Liquid production figures represent total production for each process, including quantities later evaporated to solid caustic and reported as such.<sup>15</sup> Includes sulfuric acid of oleum grades.

Source: Department of Commerce, Bureau of the Census; 1939 from Census of Manufactures; 1945-48 compiled from manufacturers' reports and published in Facts for Industry Series M19A. Monthly data published currently.

## No. 1057.—SYNTHETIC ORGANIC CHEMICALS—PRODUCTION AND SALES, BY GROUP: 1946 AND 1947

GROUP	1946			1947		
	Production (1,000 lbs.)	Sales (1,000 lbs.)	Sales value (\$1,000)	Production (1,000 lbs.)	Sales (1,000 lbs.)	Sales value (\$1,000)
ORGANIC CHEMICALS, CYCLIC						
Intermediates	2,447,614	1,417,570	159,879	2,618,771	1,444,351	187,907
Finished products	2,637,689	2,712,812	902,305	2,465,122	2,343,004	925,975
Dyes	186,307	184,855	120,289	212,156	205,062	147,968
Color index	152,244	150,898	78,691	172,786	160,750	94,348
Prototype	19,020	18,669	24,358	21,306	21,264	31,030
Ungrouped	15,043	15,288	17,240	18,065	17,048	22,581
Color lakes and toners	33,253	30,622	26,464	35,552	32,487	33,210
Medicinals	36,131	35,380	201,167	42,835	36,431	214,064
Flavor and perfume materials	13,155	11,742	17,987	14,603	12,166	17,756
Plastic materials	576,176	526,747	130,685	737,714	602,284	188,688
Rubber processing chemicals	80,062	72,832	29,568	85,830	74,353	31,008
Elastomers (synthetic rubbers)	1,379,411	1,548,275	283,473	915,995	904,292	179,449
Miscellaneous <sup>2</sup>	333,194	302,359	87,692	420,437	355,920	112,932
ORGANIC CHEMICALS, ACYCLIC						
Intermediates and finished products	9,151,190	5,379,799	845,848	10,938,778	6,202,712	1,076,108
Medicinals	4,616	5,022	17,169	6,789	5,127	14,488
Flavor and perfume materials	6,042	5,891	7,028	6,274	5,727	8,207
Plastic materials	448,942	430,146	208,537	513,956	472,455	242,626
Rubber-processing chemicals	15,500	14,553	10,837	14,892	14,225	11,594
Elastomers (synthetic rubbers)	328,376	334,820	83,483	287,243	295,100	81,972
Miscellaneous <sup>2</sup>	8,347,714	4,580,307	518,799	10,109,505	5,410,078	717,131

<sup>1</sup> Preliminary.<sup>2</sup> Includes plasticizers and surface-active agents.

Source: United States Tariff Commission; annual report, Synthetic Organic Chemicals, United States Production and Sales.

## INDUSTRIAL EXPLOSIVES

965

No. 1058.—INDUSTRIAL EXPLOSIVES MANUFACTURED AND SOLD IN THE UNITED STATES: 1924 TO 1947

[In thousands of pounds. Excludes exports]

YEAR	Total	Permissible explosives <sup>1</sup>	High explosives other than permissible	BLACK BLASTING POWDER		USE	Total	Permissible explosives <sup>1</sup>	High explosives other than permissible	Black blasting powder
				Granular	Pellet					
1946										
1924	495,533	55,134	273,323	467,076			536,315	100,258	399,233	36,824
1925	501,752	58,353	286,435	2156,964	(2)					
1926	535,890	67,685	310,518	2157,687	(2)			240,115	99,455	108,076
1927	499,011	63,847	303,468	2131,696	(2)			82,230	20	32,583
1928	475,251	60,708	292,785	98,004	23,754					82,173
1929	509,708	62,669	326,993	86,818	33,227					46
1930	445,090	53,826	291,391	63,139	36,735					
1931	337,565	41,578	216,157	46,300	33,530					
1932	233,887	32,225	137,908	35,763	27,961					
1933	255,087	33,927	157,849	33,887	30,323					
1934	314,768	39,208	206,625	37,193	31,742					
1935	308,381	39,170	200,324	34,223	34,065					
1936	391,605	47,859	262,047	40,420	41,278					
1937	404,744	49,570	288,924	29,837	36,404					
1938	332,130	41,859	238,576	23,552	28,143					
1939	386,438	49,950	278,250	28,322	29,915					
1940	423,369	58,436	305,180	29,084	30,670					
1941	481,927	70,612	351,887	27,882	31,576					
1942	490,255	84,022	359,699	24,167	31,367					
1943	477,651	92,656	338,573	19,814	26,608					
1944	464,111	102,538	318,613	16,282	26,677					
1945	457,311	97,407	322,956	12,303	24,644					
1946	536,315	100,258	390,233	13,539	23,285					
1947	651,391	122,349	476,017	9,837	26,627					

<sup>1</sup> Represents type of high explosives approved by Bureau of Mines as suitable for safe use in coal mines provided specifications of use are followed.

<sup>2</sup> Pellet powder (first manufactured for general sale in 1925) included with granular powder.

Source: Department of the Interior, Bureau of Mines; Production of Explosives in the United States.

No. 1059.—ASPHALT AND TAR ROOFING AND SIDING PRODUCTS—SHIPMENTS: 1933 TO 1948

PRODUCT AND UNIT OF MEASURE	1933	1938	1942	1943	1944	1945	1946	1947	1948
<b>Asphalt roofing, total</b>									
1,000 squares..	24,737	34,610	54,211	51,349	48,889	49,157	60,864	71,461	59,939
Smooth-surfaced.....do.....	13,838	15,027	21,632	19,236	16,386	15,832	19,421	22,482	16,344
Mineral-surfaced.....do.....	5,685	8,799	16,511	16,088	14,337	13,532	13,717	16,357	13,569
Strip shingles.....do.....	4,223	9,054	13,908	13,014	15,426	16,924	24,505	28,569	26,216
Individual shingles.....do.....	991	1,730	2,160	2,411	2,790	2,869	3,221	4,053	3,810
<b>Asphalt sidings, total</b> .....do.....	(1)	2,590	1,139	2,338	4,148	4,254	4,954	4,316	3,280
Roll form.....do.....	(1)	(1)	905	2,140	3,862	3,851	4,599	3,903	2,866
Shingle form.....do.....	(1)	(1)	234	198	236	403	355	413	414
Mineral-surfaced insulating board base siding.....1,000 squares..	(1)	(1)	720	1,012	1,725	1,885	2,444	3,686	2,560
<b>Asphalt board products</b> .....1,000 sq. ft..	(1)	(1)	(1)	(1)	73,929	91,564	70,092	86,086	31,932
<b>Saturated felts, total</b> .....tons of 2,000 lb..	(1)	(1)	(1)	(1)	312,890	327,266	296,087	457,870	538,042
Asphalt.....do.....	(1)	(1)	(1)	(1)	264,092	273,179	223,978	354,291	448,751
Tar.....do.....	(1)	(1)	(1)	(1)	48,798	54,087	72,109	103,579	89,291
<b>Saturated and coated sheathings, total</b> .....tons of 2,000 lb..	(1)	(1)	(1)	(1)	10,561	14,221	15,699	37,619	14,619
Asphalt.....do.....	(1)	(1)	(1)	(1)	8,476	11,881	(1)	(1)	(1)
Tar.....do.....	(1)	(1)	(1)	(1)	2,085	2,340	(1)	(1)	(1)

<sup>1</sup> Not available.

<sup>2</sup> Represents brick and all other types of siding.

<sup>3</sup> Not shown separately, to avoid disclosing operations of individual companies.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports, and Facts for Industry Series M26D.

No. 1060.—RUBBER (NATURAL, RECLAIMED, AND SYNTHETIC)—NEW SUPPLY, DISTRIBUTION, AND STOCKS: 1941 TO 1948

[In tons of 2,240 pounds. Natural rubber refers to dry weights of all types, including liquid latex, guayule, etc. Synthetic includes GR-S, Neoprene, Butyl, and Butadiene-Acrylonitrile; reclaimed includes natural rubber reclaims for 1941-43 and both natural and synthetic rubber reclaims for 1944-48]

ITEM	1941 <sup>1</sup>	1942	1943	1944	1945	1946	1947	1948
New supply, total	1,311,761	591,094	591,109	1,142,188	1,209,761	1,444,034	1,489,541	1,506,102
Domestic production, total	282,583	307,548	536,072	1,023,367	1,064,218	1,035,650	800,097	755,204
Natural			359	130	536	12		
Reclaimed	274,202	285,114	303,091	260,607	243,309	205,612	291,305	206,861
Synthetic	8,383	22,434	231,722	762,630	820,373	740,026	508,702	488,343
Imports, total	1,029,176	283,546	55,037	118,771	145,543	408,384	688,447	750,898
Natural	1,029,176	282,653	54,970	107,704	135,136	400,675	688,354	735,227
Reclaimed		893	67	24	( <sup>2</sup> )			
Synthetic				11,043	10,407	7,709	1,093	15,671
Distribution, total	1,052,289	691,942	834,248	1,087,597	1,143,979	1,406,202	1,440,764	1,363,492
Domestic consumption, total	1,032,490	649,262	779,607	961,866	1,040,045	1,314,706	1,410,722	1,330,517
Natural	775,000	376,791	317,034	144,113	105,429	277,597	562,661	627,332
Reclaimed	251,231	254,820	291,082	251,083	241,036	275,410	288,395	261,113
Synthetic	6,259	17,651	170,891	566,670	693,580	761,699	559,666	442,072
Exports, total	19,799	42,680	54,641	125,731	103,934	91,496	30,042	22,975
Natural	5,376	10,856	20,815	9,665	6,743	4,338	4,101	6,673
Reclaimed	13,851	30,405	15,678	11,800	13,413	14,461	14,556	11,428
Synthetic <sup>3</sup>	572	1,419	18,148	104,266	83,778	72,697	11,385	4,874
Stocks, end of year, total <sup>4</sup>	571,160	469,858	233,090	287,514	350,324	387,926	227,347	289,304
Natural	<sup>5</sup> 527,708	422,714	139,594	93,650	118,715	237,467	120,038	141,541
Reclaimed	41,750	42,532	46,201	43,832	28,155	33,666	35,943	32,630
Synthetic <sup>6</sup>	1,702	4,612	47,295	150,032	203,454	116,793	62,366	115,133

<sup>1</sup> Data for synthetic estimated.

<sup>2</sup> Less than 0.5 long tons.

<sup>3</sup> Allocations for export, 1941 and 1942, actual exports begin with 1943.

<sup>4</sup> Differences between "new supply" and "distribution" not precisely comparable with "stocks" due to year-end and inventory adjustments.

<sup>5</sup> After allowance for fire loss of Government rubber, Oct. 11, 1941.

<sup>6</sup> Includes stocks shipped for export which had not yet cleared port.

Source: 1941-46, Office of Temporary Controls, Civilian Production Administration, and predecessor agencies; published in Facts for Industry Series 26-1, 1947 and 1948, Department of Commerce, Office of Domestic Commerce. Monthly data published in Survey of Current Business.

No. 1061.—RUBBER TIRES AND TUBES—PRODUCTION, BY TYPE: 1943 TO 1948

TYPE	1943	1944	1945	1946	1947	1948
<b>TIRES (UNITS)</b>						
Airplane	1,032,789	1,414,622	820,556	258,739	167,431	160,695
Truck and bus	12,928,444	14,624,338	16,354,445	15,837,039	17,757,981	14,588,007
Tractor-implement	914,186	2,105,032	2,695,317	4,811,814	5,061,724	5,169,879
Industrial pneumatic	217,641	599,855	686,070	1,110,168	1,489,047	1,004,852
Industrial solid	( <sup>1</sup> )	<sup>2</sup> 2,866,315	2,572,324	1,494,000	<sup>3</sup> 1,240,737	1,327,603
Passenger	7,810,801	18,899,022	28,292,112	66,508,256	77,790,410	66,780,127
Motorcycle				226,185	200,587	191,969
Bicycle	4,281,871	4,277,674	5,054,477	9,061,296	9,316,107	8,901,020
<b>TUBES (UNITS)</b>						
Airplane	956,129	1,231,113	525,101	237,952	119,188	129,283
Truck and bus	12,362,747	12,464,926	16,063,134	14,855,778	14,254,002	11,492,420
Tractor-implement	699,409	1,816,518	2,673,414	4,360,864	4,481,374	4,769,430
Industrial	231,705	516,992	629,225	1,108,183	1,472,663	1,200,476
Passenger				62,392,262	65,378,102	58,657,390
Motorcycle	2,926,739	14,980,644	25,810,530	203,526	196,159	210,129
Bicycle	3,844,554	4,841,385	5,741,118	9,757,194	10,703,614	9,622,116
Camelback (tons of 2,240 lbs.) <sup>4</sup>	<sup>5</sup> 105,676	157,986	185,678	76,247	41,165	48,810

<sup>1</sup> Not available.

<sup>2</sup> Incomplete; cured-on type reported for May-Dec. only.

<sup>3</sup> Represents all solid tires.

<sup>4</sup> Rubber compound for retreading worn tires. <sup>5</sup> Reported by Rubber Mfrs. Assn. Inc., as shipments.

Source: 1943-46, Office of Temporary Controls, Civilian Production Administration, and predecessor agencies; published in Facts for Industry Series 26-2, 1947 and 1948, Rubber Mfrs. Assn. Inc., data raised to 100 percent by Dept. of Commerce, Office of Domestic Commerce. Monthly data published in Survey of Current Business.

No. 1062.—LEATHER—PRODUCTION, BY PRINCIPAL TYPES OF RAW STOCK:  
1937 TO 1948

[Cattle hide in thousands of hides, other figures in thousands of skins]

YEAR	Cattle hide	Calf and kip	Goat and kid	Sheep and lamb <sup>1</sup>	YEAR	Cattle hide	Calf and kip	Goat and kid	Sheep and lamb <sup>1</sup>
1937	22,380	12,027	46,554	34,232	1943	25,656	11,112	37,351	59,315
1938	19,047	12,991	31,805	28,941	1944	26,114	10,930	34,666	53,959
1939	22,095	14,027	40,419	39,384	1945	27,576	11,636	24,026	51,847
1940	21,013	11,387	37,697	37,920	1946	27,093	10,882	24,137	47,971
1941	28,099	13,098	45,355	51,865	1947	28,813	12,471	37,256	38,555
1942	30,822	12,264	41,122	53,634	1948	26,088	10,508	37,830	33,532

<sup>1</sup> Prior to 1940, includes skivers and excludes fleshers; beginning 1940, includes fleshers and excludes skivers.

Source: Tanners' Council of America. Monthly figures published in Survey of Current Business.

No. 1063.—LEATHER PRODUCTS, BY KIND: 1939 AND 1947

PRODUCT	PRODUCTION		PRODUCT	PRODUCTION	
	1939	1947		1939	1947
<b>CATTLE HIDE AND KIP SIDE LEATHERS</b>					
Grains:	1,000 lbs.	1,000 lbs.	Goat and kid leathers	1,000 sq. ft.	1,000 sq. ft.
Sole leather	330,201	383,657	Upper (skins)	210,916	180,626
Vegetable tanned (backs, bends, sides)			Lining (skins)	153,829	148,001
Chrome or retan (backs, bends, sides)	241,338	20,003	Glove (skins)	54,274	25,962
Heads, bellies, shoulders, etc.	188,863	145,226	Garment (skins)	2,123	820
Wellting leather	7,933	7,270	Other	690	5,843
Beltling leather	(2)	16,722	Cabretta	(2)	28,553
Curried (butts, butt bends)	6,107	15,360	Upper (skins)	(2)	7,075
Shoulders	(2)	1,362	Glove (skins)	22,320	17,611
Mechanical leather (sides)	(2)	3,769	Garment (skins)		
Harness leather (sides, backs)	7,668	5,385	Other	(2)	3,897
Collar, skirting, lace, and latigo leather (sides)	9,414	6,930	Sheep and lamb leathers	288,193	
Bag, case, and strap leather (sides)	1,000 sq. ft.	1,000 sq. ft.	Upper (skins)	815,773	12,615
Upholstery leather—top grains and machine buffs (hides)	21,245	44,045	Lining (skins)	87,288	114,065
Upper leather, excluding patent (sides)	23,387	26,661	Fancy (skins)	14,272	12,137
Patent leather (sides)	370,610	492,829	Glove (skins)	142,786	22,141
Glove leather, excluding athletic (sides)	51,286	51,168	Garment (skins)		50,499
Garment leather (sides)	10,633	{ 10,025 13,018	Skivers	31,371	24,034
Flat leather, handbag leather, and other fancy leather (sides)	3,962	10,609	Fleshers, including chamois	4,151	10,654
Other	(2)	38,347	Textile and roller (skins)	3,755	4,761
Finished splits (including deep buffs and bufflings)	(2)	276,708	Other	(2)	32,287
Bottom stock	(4)	51,404	Shearlings (skins)	19,050	35,005
Upper	39,330	51,901	Horse, colt, mule, ass, and pony leathers	(2)	53,436
Lining			Sole	3,960	3,408
Glove	138,186	{ 79,542 55,493	Upper	11,592	8,235
Garment		6,041	Glove	(2)	13,031
Upholstery, incl. beef buffs	10,193	14,683	Garment	25,679	22,552
Other	(2)	17,644	Other	(2)	6,210
Calf and whole kip leathers	150,214	128,296	Kangaroo and wallaby leather (skins)	5,529	8,853
Upper (skins)	133,470	119,994	Deer and elk leathers	7,648	7,599
Other	22,744	8,302	Reptile leather	(2)	(2)
			Aquatic leather	(2)	(2)
			Pig and hog leathers, incl. peccary, carpincho, bacon rind and strips, etc.	837	20,206
			Other animals	(2)	2,668

<sup>1</sup> Includes belting leather, except belting butts-curried.

<sup>2</sup> Not available.

<sup>3</sup> Included with cattle hide and kip side sole leathers.

<sup>4</sup> Included with lining, glove, and garment finished splits.

<sup>5</sup> Includes bottom stock splits.

<sup>6</sup> Includes lining and fancy calf and whole kip leathers.

<sup>7</sup> Included with sheep and lamb upper leather.

<sup>8</sup> Includes cabretta upper leather.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

## No. 1064.—PRESSED AND BLOWN GLASSWARE—QUANTITY AND VALUE OF SHIPMENTS, BY CLASS: 1946 AND 1947

CLASS	Unit of measure	1946		1947	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
			220,893		256,150
<b>Shipments, total value</b>					
Tumblers, goblets, and other stemware	Thous. of doz.	99,974	49,349	74,321	49,228
Cooking ware <sup>1</sup>	Thous. pieces	120,980	23,287	87,641	19,300
Ornamental, decorative, novelty glassware, and smokers' accessories, total.			13,661		12,240
<b>Lighting glassware, total</b>					
Electric-light bulb blanks, electronic-tube blanks (radio, x-ray, radar, and special tubes), and fluorescent tubes.			43,582		58,425
Bowls, all types			10,365		239,552
Enclosing globes, all types			3,944		3,433
Shades, reflectors, and torchiers			2,980		3,708
Railroad, marine, and traffic lighting glassware			5,808		4,755
Lamp chimneys	Thous. of doz.	1,844	1,431	1,379	1,116
Lantern globes (oil and electric)	Thous. of doz.	707	936	609	1,040
All other lighting glassware			7,593		3,157
<b>Technical and scientific glassware, total</b>					
Tubing (excluding fluorescent and industrial tubing).	Thous. of lbs.	15,304	17,471	3,063	30,422
All other technical and scientific glassware (including insulators, laboratory glassware, rods and canes, etc.).			24,695		6,107
Industrial glassware (including gauge glass, instrument faces, machine parts, industrial tubing, glass knobs, meter covers, pumps, battery jars, etc.)			14,408		24,315
All other pressed and blown glassware (except glass containers).			7,775		12,377
			65,468		74,092

<sup>1</sup> Heat-resistant, heat-treated, and annealed.<sup>2</sup> Includes oil founts and prisms formerly included with "all other."

Source: Department of Commerce, Bureau of the Census; 1947, Census of Manufactures reports, and Facts for Industry Series M77E.

## No. 1065.—GLASS CONTAINERS—DIRECT EXPORTS AND DOMESTIC PRODUCTION AND SHIPMENTS, BY KIND: 1946, 1947, AND 1948

[In thousand gross]

ITEM	1946		1947		1948	
	Production	Shipments	Production	Shipments	Production	Shipments
<b>Total</b>	115,664	116,084	115,344	110,170	98,679	97,333
Direct exports		2,537		4,489		3,369
Domestic production and shipments:						
Narrow-neck, total	67,594	65,935	74,843	68,026	63,029	58,746
Food		19,479		10,679		9,852
Medicinal and health supplies		13,864		11,422		11,822
Chemical, household, and industrial	38,596	6,938	35,163	5,367	5,720	4,931
Toiletries and cosmetics		6,986		4,870		7,792
Beverage, returnable	6,960	6,456	11,694	10,377	8,588	7,700
Beverage, nonreturnable					17	13
Beer, returnable	6,396	5,904	11,378	9,552	5,329	4,100
Beer, nonreturnable	858	878	3,375	3,039	3,820	3,505
Liquor	10,657	10,413	10,504	9,902	8,403	7,600
Wine	4,137	4,017	2,069	2,418	3,301	3,182
Wide-mouth, total	48,070	47,612	40,501	37,655	35,650	35,218
Food		33,028		24,591		22,937
Medicinal and health supplies		3,457		3,101		3,018
Chemical, household, and industrial	40,336	1,332	32,261	1,023	28,683	970
Toiletries and cosmetics		1,656		1,373		1,540
Dairy products	3,963	3,897	4,059	3,891	3,366	3,247
Fruit jars	2,431	2,418	2,380	2,003	2,010	1,937
Jelly glasses	222	176	214	171	184	180
Packers' tumblers	1,068	1,049	1,617	1,502	1,407	1,389

Source: Department of Commerce, Bureau of the Census; published in Facts for Industry Series M77C.

## REFRACTORIES

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## NO. 1066—REFRACTORIES—PRODUCTION AND SHIPMENTS: 1947

PRODUCT	Unit of measure	SHIPMENTS AND INTER-PLANT TRANSFERS		Production, quantity
		Quantity	Value (1,000) f.o.b. plant	
<b>Clay refractories, total</b>			\$110,897	
Fire-clay brick, standards and special shapes, except superduty	M 9" equiv.	696,364	56,000	719,603
Superduty fire-clay brick, standards and special shapes	do	65,653	6,777	71,704
Insulating fire brick, standards and special shapes	do	42,147	6,027	44,805
High-alumina brick, standards and special shapes (50% Al <sub>2</sub> O <sub>3</sub> and over, except fused alumina and mullite)	do	24,504	5,347	25,184
Ladle brick	do	152,393	6,775	151,619
Glass-house pots, tank blocks, upperstructure, and floaters	Short ton	31,829	3,689	30,963
Hot-top refractories	M 9" equiv.	47,466	4,044	48,104
Sleeves, nozzles, runner brick, and tuyeres	do	48,347	4,498	48,223
High-temperature bonding mortars	Short ton	73,720	4,615	75,644
Plastic refractories (including wet and dry ramming mixtures)	do	79,447	3,384	80,451
Cast and castables (hydraulic setting)	do	47,794	2,987	48,870
Ground crude fire clay and high-alumina material	do	404,355	3,319	406,695
Other clay refractories			3,435	
<b>Nonclay refractories, total</b>			92,315	
Silica brick and shapes	M 9" equiv.	311,136	29,407	313,001
Magnesite and magnesite-chrome (magnesite predominating) brick and shapes	do	21,992	9,507	22,461
Chrome and chrome-magnesite (chrome predominating) brick and shapes	do	38,838	13,822	38,762
Graphite and other carbon crucibles and retorts	ton	10,466	4,653	10,449
Other graphite and carbon refractories	do	2,793	1,116	2,874
High temperature bonding mortars	do	47,584	4,011	48,415
Plastic refractories (including wet and dry ramming mixtures)	do	60,671	3,848	61,181
Dead-burned magnesia and magnesite	do	294,741	9,134	293,555
Other nonclay brick and shapes (including silicon carbide, fused alumina, fused magnesia, mullite, kyanite, sillimanite, zirconia, forsterite, etc.)			12,802	
Other nonclay refractory materials sold in lump or ground form (including ground silica and nonclay cast and castables)			5,015	

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

## No. 1067—CONCRETE PRODUCTS—PRODUCTION AND SHIPMENTS: 1945, 1946, and 1947

PRODUCT AND UNIT OF MEASURE	PRODUCTION, QUANTITY		1947	
	1945	1946	Shipments and in- terplant transfers	
			Quantity	Value (1,000) f. o. b. plant
<b>Concrete products, total</b>			\$327,266	
Concrete block and brick, total			177,816	
Block: Light-weight aggregate (cinder, expanded slag, etc.)				
M block (8" x 8" x 10" equiv.)	175,314	386,389	460,782	77,296
Heavy-weight aggregate	do	225,053	553,718	94,228
Brick	62,607	218,167	291,052	6,292
Concrete pipe, total	M tons			
Culvert pipe	do		{ 4,333	4,463
Sewer pipe: Reinforced	do		1,478	1,589
Nonreinforced	do		{ 717 { 525	23,111
Pressure pipe	do		{ 560 { 422	1,648
Irrigation pipe	do		{ 721 { 15,470	551
Other pipe (including drain tile and conduits)	do		{ 516 { 10,268	580
Other precast concrete products, total	M sq. ft.		{ 67,004 { 8,161	423
Roof-and-floor slabs and tile	do		{ 40,617 { 15,839	742
Burial vaults and boxes	Number		{ 396,900 { 506,007	519
Laundry trays	do		{ 3,823 { 7,915	511,073
Cast stone for architectural purposes (including window sills, lintels, ashlar, coping, posts, ornamental columns, interior facings, and other trim)	M lin. ft.		{ 2,319 { 1,481	39,542
Roof-and-floor joists and beams	M staves		{ 10,211 { 5,536	400,437
Silo staves	M staves			10,446
Other precast concrete products (including piling, posts and poles, crossing slabs, garden furniture, storage and septic tanks, catch-basin covers, shower receptors, gravestones, and prefabricated housing units)	M staves			18,888

<sup>1</sup> Not available.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports, and Facts for Industry Series M260.

**NO. 1068.—STRUCTURAL CLAY PRODUCTS—PRODUCTION AND SHIPMENTS, BY KIND:  
1945 TO 1948**

PRODUCT AND UNIT OF MEASURE	1945	1946	1947	1948
Unglazed brick:				
Production.....1,000 standard bricks..	2,289,442	4,868,763	5,142,343	5,842,479
Shipments: Quantity.....do.....	2,374,672	4,643,787	5,011,556	5,706,838
Value.....1,000 dollars.....	38,191	91,926	111,915	134,693
Unglazed hollow facing tile:				
Production.....1,000 brick equivalent..	89,069	100,422	135,386	135,292
Shipments: Quantity.....do.....	98,793	100,066	129,850	132,841
Value.....1,000 dollars.....	2,275	2,711	3,985	1,16,029
Glazed hollow facing tile:				
Production.....1,000 brick equivalent..	85,491	174,744	229,752	(1)
Shipments: Quantity.....do.....	92,651	171,866	214,273	(1)
Value.....1,000 dollars.....	3,856	8,052	10,331	(1)
Vitrified paving brick:				
Production.....1,000 bricks..	14,504	22,702	24,771	(2)
Shipments: Quantity.....do.....	22,507	25,376	20,727	(2)
Value.....1,000 dollars.....	692	833	769	(2)
Unglazed structural tile:				
Production.....short tons..	738,518	1,273,109	1,237,230	1,262,953
Shipments: Quantity.....do.....	797,954	1,243,661	1,183,050	1,250,904
Value.....1,000 dollars.....	6,392	11,490	12,310	13,364
Vitrified clay sewer pipe:				
Production.....short tons..	697,508	1,080,761	1,304,687	1,406,247
Shipments: Quantity.....do.....	776,517	1,077,584	1,341,523	1,432,512
Value.....1,000 dollars.....	18,333	30,288	42,984	46,731
FLOOR AND WALL TILE AND ACCESSORIES				
Glazed—				
Production.....1,000 square feet..	24,678	43,612	77,387	3 104,061
Shipments: Quantity.....do.....	24,670	43,291	75,601	3 102,251
Value.....1,000 dollars.....	7,350	15,202	33,702	3 46,646
Unglazed (except quarry tile)—				
Production.....1,000 square feet..	8,680	12,802	20,431	(3)
Shipments: Quantity.....do.....	8,492	12,973	25,450	(3)
Value.....1,000 dollars.....	2,095	3,447	8,274	(3)
Quarry tile:				
Production.....1,000 square feet..	(2)	5,114	7,374	(3)
Shipments: Quantity.....do.....	(2)	5,409	6,847	(3)
Value.....1,000 dollars.....	(2)	797	1,674	(3)
Drain tile:				
Production.....short tons..	435,819	464,718	933,060	750,250
Shipments: Quantity.....do.....	443,910	464,096	894,920	734,331
Value.....1,000 dollars.....	4,491	5,613	13,048	10,866
All other clay construction products, <sup>4</sup> value of shipments 1,000 dollars.....	4,178	8,337	21,903	(2)

<sup>1</sup> Glazed hollow facing tile included with unglazed hollow facing tile.

<sup>2</sup> Not available.

<sup>3</sup> Unglazed floor and wall tile and quarry tile included with glazed floor and wall tile.

<sup>4</sup> Includes glazed brick, flooring brick, acid-proof brick, silo and cornerib tile, architectural terra cotta, roofing tile, wall coping, flue lining, conduits, stove lining, and chimney pipe, tops, and thimbles.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports, and Facts for Industry Series M26A and M26B.

No. 1069.—PIG IRON AND FERRO-ALLOYS—PRODUCTION, BY DISPOSITION, KIND, AND FUEL AND MATERIALS USED: 1900 TO 1947

[In thousands of short tons (2,000 lbs.)]

ITEM	1900	1910	1920	1925	1930	1935	1940	1945	1946	1947
Total pig iron and ferro-alloys.....	15,444	30,580	41,357	41,105	35,562	23,937	47,399	54,919	46,515	60,117
By disposition:										
For sale.....	( <sup>1</sup> )	( <sup>1</sup> )	12,011	10,070	7,933	4,505	6,837	8,351	7,046	9,121
For maker's use.....	( <sup>1</sup> )	( <sup>1</sup> )	20,346	31,034	27,630	19,433	40,561	46,569	38,869	50,996
By kind:										
Basic.....	1,201	10,175	18,746	22,027	20,601	15,253	33,988	39,867	33,728	44,805
Bessemer and low-phosphorus.....	8,936	12,595	13,510	10,550	8,183	4,747	7,835	8,570	6,099	7,513
Foundry (incl. ferro-silicon).....	3,781	5,892	6,673	6,050	4,436	2,137	2,791	3,067	3,585	3,756
Malleable.....	104	944	1,468	1,740	1,760	1,350	1,832	2,350	2,190	2,875
Forge.....	888	632	356	270	57	6	4			
Ferromanganese, spiegeleisen, and all other.....	442	342	604	458	517	444	949	1,066	912	1,168
By fuel:										
Coke <sup>2</sup> .....	13,135	29,409	40,656	40,885	35,455	23,854	47,812	54,871	46,515	50,117
Anthracite.....	1,878	727	339	220	109	84	86	48	( <sup>3</sup> )	( <sup>3</sup> )
Charcoal.....	431	444	362							
Materials used:										
Iron ore, briquettes, etc.....	27,027	57,948	74,424	73,304	400,101	439,405	479,672	491,276	477,242	410,940
Cinder, scale, scrap, etc.....	1,792	3,136	5,585	5,619	47,052	44,768	47,480	49,749	47,576	49,168
Coke <sup>4</sup> .....	( <sup>1</sup> )	( <sup>1</sup> )	42,046	39,296	31,168	20,272	40,451	48,965	41,823	45,412
Limestone.....	8,313	16,271	18,964	16,973	12,431	8,425	16,678	20,863	18,180	24,032
Total number furnaces Dec. 31 <sup>5</sup> .....	406	473	452	395	300	258	231	241	233	239
Furnaces in blast Dec. 31 <sup>6</sup> .....	232	206	216	238	97	124	206	201	218	229

<sup>1</sup> Not available.

<sup>2</sup> Includes pig iron and ferro-alloys made in electric furnaces.

<sup>3</sup> Charcoal included with coke.

<sup>4</sup> Coke and bituminous coal 1900 to 1925.

<sup>5</sup> Materials consumed in manufacture of pig iron only.

<sup>6</sup> Or as of Jan. 1 of following year.

Source: American Iron and Steel Institute, annual report.

No. 1070.—PIG IRON AND FERRO-ALLOYS—PRODUCTION BY STATES: 1940 TO 1947

[In thousands of short tons (2,000 pounds)]

STATE	1940	1941	1942	1943	1944	1945	1946	1947
Grand total.....	47,399	56,687	60,903	62,770	62,866	54,919	46,515	60,117
Pig iron, total.....	46,072	55,101	59,076	60,811	61,007	53,223	44,779	58,329
Pennsylvania.....	14,288	16,895	18,065	18,575	18,510	16,171	13,251	17,563
Ohio.....	9,970	12,787	13,140	13,725	13,371	11,259	9,534	12,317
Indiana, Michigan.....	6,089	7,725	8,114	8,208	8,474	7,436	6,190	7,779
Illinois.....	4,047	5,355	5,850	5,950	5,688	5,045	4,857	5,600
Maryland, Virginia, West Virginia, Kentucky, Tennessee, Texas.....	3,576	3,727	4,301	4,595	4,781	4,327	3,606	4,481
Alabama.....	3,410	3,696	4,082	3,780	3,949	3,582	3,149	3,929
Massachusetts, New York.....	3,113	3,758	4,221	4,178	3,947	3,295	2,780	3,860
Minnesota, Iowa, Colorado, Utah, California.....	971	1,158	1,212	1,800	2,269	2,109	1,912	2,792
Ferro-alloys, total.....	1,327	1,586	1,827	1,959	1,859	1,696	1,736	1,788
Pennsylvania.....	515	620	627	603	637	573	437	553
New York, New Jersey.....	323	494	540	544	478	449	701	431
Virginia, West Virginia, South Carolina, Alabama, Tennessee.....	143	160	308	422	380	322	265	415
Ohio, Indiana, Illinois, Iowa, Colorado, Washington.....	345	311	352	391	363	351	333	389

Source: American Iron and Steel Institute, annual report.

**NO. 1071.—PIG IRON AND FERRO-ALLOYS AND STEEL INGOTS AND CASTINGS—  
PRODUCTION, EXPORTS, AND IMPORTS: 1871 TO 1947**

[In short tons (2,000 pounds). Prior to 1901 exports and imports are for years ending June 30 following year specified; calendar years thereafter. Imports are imports for consumption beginning with 1933. All production figures are for calendar years. For figures for earlier years, see Abstract for 1931]

YEARLY AVERAGE OR YEAR	PIG IRON AND FERRO-ALLOYS			Steel ingots and cast- ings, pro- duction <sup>1</sup>	YEAR	PIG IRON AND FERRO-ALLOYS			Steel ingots and cast- ings, pro- duction <sup>1</sup>
	Produc- tion	Exports of domestic	Imports			Production	Exports of domestic	Imports	
1871-1875-	2,518,088	8,301	154,102	2,436,575	1931-----	20,637,516	17,280	115,965	29,058,961
1876-1880-	2,870,295	3,816	309,792	898,896	1932-----	9,835,227	7,771	162,144	15,322,001
1881-1885-	4,817,228	5,948	364,325	1,850,560	1933-----	14,947,074	12,625	219,838	26,020,229
1886-1890-	7,928,829	13,806	257,566	3,687,895	1934-----	18,075,202	15,091	176,273	29,181,924
1891-1895-	9,108,976	25,741	61,351	5,236,824	1935-----	23,937,423	19,840	211,901	38,183,705
1896-1900-	12,870,969	251,180	38,425	9,452,731	1936-----	34,752,689	26,439	284,487	53,499,999
1901-1905-	20,428,425	50,921	352,537	17,212,083	1937-----	41,582,550	31,606	180,625	56,636,045
1906-1910-	26,907,689	88,052	308,040	24,826,797	1938-----	21,460,164	15,004	80,008	31,751,990
1911-1915-	30,820,405	226,252	148,681	31,783,886	1939-----	35,677,097	238,224	129,497	52,798,714
1916-1920-	41,451,650	463,931	119,718	40,838,598	1940-----	47,398,524	685,617	45,503	66,982,686
1921-1925-	34,132,119	41,444	405,785	41,138,917	1941-----	56,686,604	610,720	28,844	82,839,250
1926-1930-	42,215,094	58,316	289,690	54,186,963	1942-----	60,903,304	150,151	31,606	86,021,931
1931-1935-	17,486,488	14,521	177,424	27,553,544	1943-----	62,769,947	231,068	28,056	88,836,512
1936-1940-	36,174,206	476,400	144,024	52,334,066	1944-----	62,866,198	185,526	34,190	89,641,600
1941-1945-	59,629,017	260,058	39,378	85,410,090	1945-----	54,919,029	122,819	74,193	79,701,648
1929-----	47,727,661	60,199	250,522	63,205,490	1946-----	46,514,826	134,648	55,105	66,602,724
1930-----	35,562,429	28,385	204,340	45,583,421	1947-----	60,117,319	92,676	231,473	84,894,071

<sup>1</sup> Beginning 1934, includes only steel castings produced in foundries producing steel ingots.

<sup>2</sup> 1875 only.

Source: Production, American Iron and Steel Institute, annual report. Exports and imports, Dept. of Commerce, Bureau of Census; annual report, Foreign Commerce and Navigation of the U. S. and records.

**No. 1072.—ROLLED AND MISCELLANEOUS STEEL PRODUCTS—PRODUCTION, BY KIND: 1925 TO 1947**

[In short tons (2,000 pounds). See also *Historical Statistics*, series J 170]

KIND	1925	1930	1935	1940	1945	1946	1947
<b>Hot-rolled products, total-----</b>	<b>37,393,395</b>	<b>33,054,568</b>	<b>26,846,298</b>	<b>48,660,369</b>	<b>59,811,669</b>	<b>50,936,772</b>	<b>66,202,144</b>
Plates-----	4,203,865	4,102,362	1,629,987	3,423,408	7,245,888	4,433,747	6,745,968
Sheets-----	4,588,452	3,932,944	5,796,624	11,705,956	12,067,487	11,889,423	16,450,776
Black plate-----	2,192,261	2,120,144	2,307,462	521,924	941	1,029	128,756
Strip-----	1,398,471	2,174,885	2,965,300	2,077,744	2,542,935	2,465,900	3,026,562
Strip and sheets for cold reduced black plate and tin plate-----	(1)	(1)	(1)	3,103,627	4,436,924	4,485,832	5,046,462
Hoops-----	229,655	89,425	100,634	97,074	51,891	47,932	59,543
Cotton ties and baling bands-----	398,905	51,737	27,685	44,918	34,216	35,237	50,499
Bars—merchant-----	6,328,433	4,627,810	4,142,944	6,459,263	9,649,412	7,713,390	9,314,803
Bars—concrete-----	917,937	952,169	624,243	944,998	884,806	1,107,038	1,466,822
Structural shapes-----	4,036,626	3,933,970	1,950,709	4,232,346	4,467,164	4,387,664	5,607,671
Sheet piling-----	64,136	118,275	145,929	186,125	188,639	176,297	202,539
Rails-----	3,119,458	2,098,021	790,921	1,078,986	2,417,520	1,965,642	2,441,179
Long splice bars and tie bars-----	921,241	679,157	300,471	515,928	856,638	700,904	793,709
Skeins-----	3,617,340	3,003,892	1,514,328	2,709,000	2,894,028	2,534,848	3,450,460
Blanks or pierced billets for seamless tubes-----	(2)	1,397,935	1,067,776	2,320,966	3,384,480	2,743,814	3,517,521
Wire rods-----	3,186,015	2,630,432	2,732,689	4,351,848	4,531,157	4,520,280	5,376,003
Rolled forging billets-----	356,179	340,581	380,697	319,826	3,568,697	946,810	954,906
Blooms, billets, etc. for export-----	209	10,623	44,750	1,677,905	178,600	310,100	376,075
Rolled steel car wheels-----	(2)	(2)	83,714	191,102	291,375	248,571	347,301
All other-----	1,794,182	790,206	217,426	116,425	170,867	162,134	183,929
<b>Miscellaneous products:<sup>2</sup></b>							
In plate and terneplate-----	1,856,730	1,882,619	1,996,960	2,738,581	2,827,483	2,709,651	3,757,141
Galvanized sheets-----	1,269,556	1,170,681	1,151,743	1,695,300	1,676,181	1,431,940	1,537,191
Galvanized formed products-----	89,110	73,047	67,245	84,554	53,717	137,173	153,809
Wire (plain)-----	(1)	(1)	2,177,816	3,071,824	3,544,826	3,615,924	4,462,444
Wire nails-----	772,687	478,071	443,596	648,593	583,048	610,014	776,251
Cut nails and spikes-----	36,805	22,996	19,748	24,377	15,279	22,656	27,077
Pipes and tubes (black)-----	(1)	(1)	2,276,544	4,272,654	6,030,243	5,058,408	6,012,048
Forgings made by rolling mills-----	434,414	4,532,978	4,352,390	4,623,101	4,655,746	4,494,808	4,542,971

<sup>1</sup> Not available.

<sup>2</sup> Included in all other.

<sup>3</sup> These are mostly further elaborations of products listed above.

<sup>4</sup> Including forged axles.

Source: American Iron and Steel Institute, annual report.

No. 1073.—STEEL—PRODUCTION OF INGOTS AND STEEL FOR CASTINGS:  
1890 TO 1947

In short tons (2,000 pounds.) See also *Historical Statistics*, series J 165-169]

YEAR	Total <sup>1</sup>	OPEN HEARTH			Bessemer	Electric	Crucible
		Total	Basic	Acid			
1890	4,700,320	574,820	(2)	(2)	4,131,536	(2)	79,716
1900	11,410,928	3,805,911	2,850,502	955,409	7,486,942	(2)	112,629
1910	29,226,309	18,485,050	17,127,408	1,357,642	10,542,305	58,398	136,979
1915	36,009,160	26,520,594	24,985,772	1,534,822	9,281,679	77,741	127,436
1920	47,188,886	36,592,522	35,140,810	1,451,712	9,949,057	566,370	80,937
1925	50,840,747	42,598,627	41,537,823	1,000,804	7,530,837	689,373	21,910
1930	45,583,421	39,255,073	38,380,514	874,550	5,639,714	686,111	2,523
1935	38,183,705	34,401,280	34,004,585	390,695	3,175,235	606,471	719
1937	56,636,945	51,824,979	51,265,211	559,768	3,863,918	947,002	1,046
1938	31,751,990	29,080,016	28,774,999	305,017	2,106,340	565,627	7
1939	52,798,714	48,409,800	47,828,700	581,100	3,358,916	1,029,067	931
1940	66,982,686	61,573,083	60,882,840	890,243	3,708,573	1,700,006	1,024
1941	82,839,259	74,389,619	73,312,851	1,076,768	5,578,071	2,869,256	2,313
1942	86,081,931	70,601,967	75,183,065	1,318,892	5,533,424	3,974,640	2,010
1943	88,836,512	78,621,804	77,207,870	1,413,934	5,625,492	4,580,070	146
1944	89,641,600	80,363,963	79,168,294	1,195,659	5,039,923	4,237,699	25
1945	79,701,648	71,939,602	71,069,876	869,726	4,306,318	3,456,704	24
1946	66,602,724	60,711,963	60,112,300	599,663	3,327,737	2,563,024	(3)
1947	84,894,071	76,873,793	76,209,268	864,525	4,232,543	3,787,735	(3)

<sup>1</sup> Includes all other grades not shown separately, as follows: 1890, 4,248 tons; 1900, 5,445; 1910, 3,577; 1915, 1,710. Beginning 1935, figures include only that part of steel for castings which was made in foundries producing steel ingots.

<sup>2</sup> Not available.

<sup>3</sup> Included with electric steel.

Source: American Iron and Steel Institute, annual report.

No. 1074.—BLAST FURNACES AND STEEL MILLS—SUMMARY: 1889 TO 1947

[Data for years prior to 1937 include figures for steel castings, thereafter such data are excluded]

YEAR	Number of establishments	Production and related workers (average number)	Wages (\$1,000)	Value added by manufacture (\$1,000)
1889	719	171,181	89,273	151,415
1899	668	222,490	120,820	281,569
1909	654	278,505	187,807	399,013
1919	695	416,748	711,407	1,321,507
1923	658	424,913	696,761	1,289,910
1925	595	399,914	660,297	1,281,976
1927	602	389,270	646,534	1,219,534
1929	591	419,534	730,974	1,622,837
1931	526	278,206	357,645	1,623,199
1933	466	288,945	270,367	481,529
1935	468	374,808	458,584	893,681
1937	352	401,118	755,427	1,503,959
1939	334	388,441	598,037	1,234,631
1947	301	470,785	1,431,536	2,603,757
Blast furnaces:				
1937 <sup>2</sup>	87	23,075	38,001	127,644
1939 <sup>2</sup>	81	19,537	28,312	87,083
1947	86	32,607	93,598	328,060
Steel works and rolling mills:				
1937	265	438,043	717,425	1,376,314
1939	253	368,904	569,724	1,147,548
1947	215	438,088	1,337,938	2,275,697

<sup>1</sup> Value of products less cost of materials, supplies, fuel, electricity, and contract work. For 1889-1933, cost of contract work was not deducted.

<sup>2</sup> Includes data for 5 establishments in 1937 and 2 in 1939 engaged in production of sintered ore and flue dust and operated independently of blast furnaces.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

**No. 1075.—IRON AND STEEL CASTINGS—SHIPMENTS: 1944 TO 1948**

**[In short tons.** For malleable iron castings, data represent complete coverage. Data for gray iron castings represent approximately 93 percent (for pressure pipe and soil pipe, practically complete) coverage for 1943, and complete coverage for 1944-46. For steel castings, data represent about 94 percent coverage for 1943 and 1944, and complete coverage for 1945 and 1946. For 1947 and 1948, data on gray iron castings and steel castings represent preliminary estimates of complete coverage, based on a sample of the foundries]

YEAR	Malleable iron castings	GRAY IRON CASTINGS			STEEL CASTINGS		
		Total	Pressure pipe and fittings	All other gray iron castings	Total	Grade of steel	
1944	878,233	9,794,541	507,525	181,956	9,105,060	2,445,421	1,825,130
1945	790,731	9,578,295	602,663	203,033	8,772,699	1,942,477	1,434,473
1946	752,028	10,269,657	786,314	409,214	9,074,129	1,432,049	1,112,243
1947	895,054	12,540,960	1,031,626	577,189	10,932,145	1,625,055	1,241,005
1948	933,091	12,785,909	1,149,553	639,989	10,996,367	1,759,127	1,370,150

Source: Department of Commerce, Bureau of the Census. Monthly data published in Facts for Industry Series M21A, M21B, and M22A.

**No. 1076.—STEEL CASTINGS FOR SALE—PRODUCTION AND ORDERS BOOKED, BY TYPE OF CASTING: 1920 TO 1948**

**[In short tons.** Approximate coverage of industry is as follows: 1920-30, 80 percent; 1935, 90 percent; 1940-44, 96 percent; 1945-46, 100 percent; 1947 and 1948, preliminary estimates of complete coverage, based on a sample of the foundries]

YEAR	PRODUCTION			ORDERS BOOKED LESS CANCELLATIONS		
	Total	Railway specialties	Miscellaneous	Total	Railway specialties	Miscellaneous
1920	{ (1)	{ (1)	{ (1)	{ 997,358	{ 429,643	{ 567,715
1925	991,872	368,600	623,182	981,343	423,047	557,896
1930	398,988	94,329	304,659	884,433	332,199	551,234
1935	797,947	290,255	507,692	400,157	97,557	302,800
1940	1,816,027	471,816	844,217	816,919	266,418	550,501
1941	1,679,178	309,352	1,369,826	2,157,347	219,145	1,968,202
1942	1,928,645	248,664	1,679,081	2,333,420	352,760	1,980,660
1943	1,843,386	338,007	1,505,379	1,914,204	322,630	1,591,664
1944	2,148,957	211,833	1,173,124	1,529,912	352,382	1,177,530
1945	2,1,043,358	236,131	1,757,227	3,1,069,842	328,511	3,786,331
1946	2,1,203,504	234,987	2,801,517	3,1,330,081	349,432	3,880,649
1947	2,1,335,295	242,258	2,803,037	3,1,200,389	375,094	3,825,205

<sup>1</sup> Not available.

<sup>2</sup> Shipments beginning with last quarter of 1945.

<sup>3</sup> Calculated from data on shipments and unfilled orders.

Source: Department of Commerce, Bureau of the Census. Monthly data published in Facts for Industry Series M22A.

**No. 1077.—MALLEABLE IRON CASTINGS—SHIPMENTS AND ORDERS BOOKED: 1925 TO 1948**

**[In short tons.** Statistics\* represent coverage of approximately 90 percent for 1925-43. Thereafter coverage is complete and represents reports from 115 foundries]

YEAR	SHIPMENTS			NEW ORDERS LESS CANCELLATIONS		
	Total	To outside trades	For use by own company or by an affiliate or subsidiary, or parent company	Total	For outside trades	For use by own company or by an affiliate or subsidiary, or parent company
1925	704,174	(1)	(1)	750,761	(1)	(1)
1930	475,371	(1)	(1)	432,722	(1)	(1)
1935	455,208			452,611		
1939	466,068	331,421	134,647	480,482	354,240	135,233
1940	556,209	400,818	155,391	571,929	414,310	157,619
1941	832,173	619,365	212,808	884,881	663,688	221,193
1942	746,008	590,804	155,204	859,102	703,167	155,055
1943	844,639	653,884	190,755	1,054,224	826,422	227,802
1944	878,233	619,588	258,645	969,483	655,511	283,972
1945	790,731	520,887	269,844	760,711	426,150	340,552
1946	752,028	452,355	209,673	(1)	483,368	(1)
1947	895,054	513,228	381,826	(1)	447,975	(1)
1948	933,091	524,563	408,528	(1)	460,640	(1)

<sup>1</sup> Not available.

Source: Department of Commerce, Bureau of the Census. Monthly data published in Facts for Industry Series M21B.

## No. 1078.—IRON AND STEEL, FINISHED ROLLED—PRODUCTION, EXPORTS, AND IMPORTS: 1876 TO 1947

[In short tons (2,000 pounds). Imports are imports for consumption beginning with 1933; general imports in earlier years. Blank spaces indicate no data available. See also *Historical Statistics*, series J 170 for data on total production.]

YEARLY AVERAGE OR YEAR (CALENDAR YEAR)	Total production, finished rolled products	RAILS			PLATES AND SHEETS			Merchant bar produ- ction <sup>2</sup>
		Production	Exports	Imports	Production	Exports	Imports <sup>1</sup>	
1876-1880		1,020,426	4,974	67,033				
1881-1885		1,426,531	4,464	131,009				
1886-1890	5,911,000	1,915,511	8,148	55,748	3,767,104		8,975	
1891-1895	6,129,591	1,416,438	15,288	1,173	846,516	1,691	26,761	
1896-1900	9,142,067	2,107,734	260,420	2,687	1,638,544	34,714	5,344	
1901-1905	15,311,416	3,242,555	252,836	48,392	3,017,980	44,246	6,907	4,024,833
1906-1910	20,730,629	3,627,104	339,622	4,439	4,540,594	177,622	4,588	3,897,171
1911-1915	24,920,984	3,091,824	424,247	20,589	6,028,088	466,372	3,220	4,222,754
1916-1920	34,507,928	2,945,047	616,920	23,859	9,235,794	1,016,396	1,765	7,050,073
1921-1925	30,488,732	2,794,109	274,737	35,530	8,875,380	488,464	4,265	5,375,343
1926-1930	39,562,938	2,971,808	178,599	22,228	11,797,300	536,823	27,580	7,080,024
1931-1935	20,002,332	828,436	46,310	5,780	6,891,694	181,332	14,560	3,356,504
1936-1940	38,066,554	1,334,946	139,217	6,511	13,664,259	791,080	8,963	6,217,207
1941-1945	62,735,684	2,211,836	270,472	14,372	21,370,112	1,307,781	1,883	11,284,428
1946								
1947								
1931	21,477,001	1,296,681	37,081	5,608	6,764,331	215,970	18,936	3,454,076
1932	11,705,219	450,874	12,678	6,341	3,866,505	88,515	24,022	1,903,441
1933	18,743,296	466,252	46,459	7,171	6,902,648	121,902	10,643	2,973,655
1934	21,245,847	1,131,451	77,458	3,442	7,140,913	226,537	5,204	3,684,162
1935	26,840,298	796,921	57,873	6,337	9,734,073	258,758	13,141	4,767,187
1936	37,857,544	1,366,228	82,270	8,700	13,610,595	346,753	25,796	6,822,492
1937	41,178,356	1,619,228	166,964	9,294	15,721,261	885,199	10,095	6,755,012
1938	23,568,051	697,642	92,648	4,059	8,506,233	573,817	7,167	3,484,923
1939	39,007,553	1,312,647	66,183	8,718	13,931,919	729,366	1,006	6,138,350
1940	48,660,369	1,078,988	269,020	1,780	13,561,288	1,420,311	153	7,858,261
1941	62,324,187	1,927,851	169,542	7,072	20,293,071	1,064,180	125	10,978,008
1942	62,445,914	2,096,150	266,150	14,435	21,237,072	1,364,824	254	11,939,982
1943	63,292,673	2,126,906	311,861	7,384	22,543,040	1,551,567	468	11,855,047
1944	65,803,970	2,490,656	316,915	9,803	23,463,059	1,246,556	5,865	11,161,194
1945	59,811,669	2,417,520	327,883	32,474	19,314,316	1,341,777	2,751	10,484,218
1946	50,936,772	1,065,042	385,584	7,997	16,324,199	1,159,109	2,254	8,880,428
1947	66,202,144	2,441,179	500,582	10,207	23,325,500	1,272,770	1,843	10,781,025
YEARLY AVERAGE OR YEAR (CALENDAR YEAR)	Skelp production	WIRE RODS			STRUCTURAL SHAPES			All other finished rolled production <sup>2</sup>
		Production	Exports	Imports	Production	Exports	Imports	
1891-1895		709,238		38,980	4,481,457			2,772,234
1896-1900		1,018,597	6,18,124	20,257	772,149	6,64,742		3,603,643
1901-1905	4,608,314	1,781,114	18,306	20,697	1,348,246	62,329	7,14,432	1,415,004
1911-1915	1,886,915	2,303,540	15,011	17,248	2,160,885	135,616	12,440	2,323,590
1916-1920	2,511,342	2,933,601	84,252	13,198	2,739,958	297,708	7,114	3,392,518
1921-1925	3,123,004	3,836,179	162,072	4,188	3,340,000	370,744	3,143	5,477,829
1926-1930	3,345,985	2,836,325	31,408	4,803	3,199,711	224,177	31,317	4,031,879
1931-1935	3,752,372	3,148,573	35,059	16,096	4,489,127	311,101	160,219	3,322,836
1936-1940	2,282,301	3,424,301	97,413	12,251	3,317,886	237,283	49,232	7,525,593
1941-1945	3,100,884	4,754,339	148,351	482	5,052,000	287,700	6,278	14,902,077
1946								
1931	1,679,194	2,065,974	25,980	7,968	2,310,401	186,332	31,008	3,906,344
1932	680,511	1,328,523	16,596	8,886	1,049,695	36,468	40,983	2,435,670
1933	1,113,357	2,266,086	18,902	14,940	1,242,592	35,877	32,812	3,717,306
1934	1,254,643	1,930,617	26,550	11,936	1,596,045	60,003	28,026	4,505,016
1935	1,514,328	2,733,689	29,223	18,794	1,959,709	64,191	46,593	5,334,391
1936	2,415,394	3,357,626	39,057	21,180	3,245,346	98,143	68,974	7,039,803
1937	2,553,445	3,370,405	67,200	17,717	3,670,068	208,072	87,666	7,488,037
1938	1,403,540	2,361,630	24,957	5,914	2,682,665	142,822	44,379	5,032,298
1939	2,330,128	3,680,297	35,224	11,975	3,358,985	182,731	44,277	8,315,227
1940	2,700,000	4,351,848	320,621	4,465	4,232,346	554,644	851	11,251,640
1941	3,037,574	5,268,423	187,326	119	5,724,236	365,238	356	14,404,334
1942	2,900,741	4,632,017	145,251	57	5,816,321	229,757	168	13,823,622
1943	3,022,398	4,693,798	170,039	31	4,575,844	239,085	161	14,472,550
1944	3,049,682	4,646,298	123,804	2	4,076,481	235,592	28,017	16,316,609
1945	2,894,023	4,531,157	109,334	2,199	4,467,104	307,956	2,682	15,708,271
1946	2,534,848	4,520,280	62,355	6,054	4,387,804	449,270	874	12,323,711
1947	3,450,460	5,370,003	71,237	6,018	5,607,671	752,790	1,731	15,219,796

<sup>1</sup> Includes skelp beginning 1922.

<sup>2</sup> Merchant bars include concrete reinforcement bars and, beginning 1934, certain miscellaneous bars previously included in "All other finished rolled production."

<sup>3</sup> Average for years 1887-90.

<sup>4</sup> Average for years 1902-05.

<sup>5</sup> Average for years 1892-95.

<sup>6</sup> Average for period July 1, 1897, to Dec. 31, 1900.

<sup>7</sup> Average for period July 1, 1903, to Dec. 31, 1905.

<sup>8</sup> Small structural forms not included in 1931.

## No. 1079.—IRON AND STEEL—AGGREGATE EXPORTS: 1890 TO 1948

[Covers products listed in table 1080; excludes data for highly elaborated products of iron and steel. Value figures through 1921 exclude, and those beginning 1922 include data for small items for which quantity figures are not available. Ferromanganese data included for all years. Data for steam and hot-water heating boilers and radiators, formerly classified as heavy iron and steel products, excluded beginning with 1922]

[Quantities in thousands of short tons (2,000 pounds); values in thousands of dollars]

YEAR	Quantity	Value	YEAR	Quantity	Value	YEAR	Quantity	Value
1890	58		1925	1,074	144,262	1937	8,488	302,360
1895	100		1926	2,427	174,145	1938	5,766	185,432
1900	1,292	42,518	1927	2,445	160,609	1939	6,814	236,947
1905	1,131	33,813	1928	3,209	179,881	1940	11,876	524,426
1910	1,723	63,436	1929	3,402	200,203	1941	8,029	506,901
1915	3,957	140,993	1930	2,220	139,039	1942	7,387	598,039
1919	4,928	410,164	1931	1,085	63,226	1943	7,245	621,347
1920	5,327	458,376	1932	666	28,857	1944	6,148	560,178
1921	2,479	214,830	1933	1,502	45,534	1945	5,203	461,147
1922	2,235	136,334	1934	3,150	88,691	1946	5,149	449,881
1923	2,251	167,247	1935	3,431	88,414	1947	7,029	363,266
1924	2,023	150,494	1936	3,536	112,692	1948	4,885	659,720

## No. 1080.—IRON AND STEEL—EXPORTS, BY KIND: 1945 TO 1948

ARTICLE	QUANTITY (TONS OF 2,000 LBS.)				VALUE (\$1,000)			
	1945	1946	1947	1948 <sup>1</sup>	1945	1946	1947	1948 <sup>1</sup>
	Total	5,203,250	5,149,303	7,029,305	4,884,699	461,147	449,881	863,266
Pig iron, not including ferro-alloys	90,833	95,698	10,940	7,032	2,393	2,670	316	217
Ferromanganese and spiegeleisen	3,229	10,464	20,473	19,747	258	653	2,824	2,993
Other ferro-alloys	5,380	8,188	40,295	64,222	3,442	2,070	3,365	7,330
Scrap	95,734	149,106	194,081	243,690	2,589	3,385	9,854	12,547
Ingot, blooms, sheet bars, skelp, etc.	350,281	509,097	558,617	277,261	17,045	23,926	35,944	20,108
Iron and steel bars and alloy steel bars	602,701	699,063	1,133,252	542,934	50,558	52,425	118,561	60,623
Wire rods	109,333	62,355	71,237	38,143	5,493	3,830	7,117	3,784
Galvanized sheets	174,746	77,746	74,439	62,783	15,159	7,557	10,511	8,212
Plates, iron and steel	213,964	532,607	562,480	347,698	13,398	33,422	47,849	33,448
Black steel sheets	742,304	492,783	568,760	416,481	53,250	40,078	85,106	57,396
Black iron sheets	12,835	31,177	30,215	17,773	944	2,478	3,754	2,008
Hoop, band, and strip steel	142,384	149,001	196,765	128,577	14,336	15,647	28,471	19,975
Tin plate, terneplate, etc.	527,610	398,480	620,198	613,784	55,457	43,569	86,918	97,103
Structural shapes, plain material	286,412	318,899	463,375	292,176	14,429	18,062	32,519	23,388
Structural materials, fabricated	277,580	161,689	329,837	222,977	31,086	19,612	79,920	46,476
Tanks, complete and knocked down	32,977	49,331	98,234	92,448	4,347	5,873	15,179	15,327
Metal lath	1,892	3,538	5,717	7,233	331	679	1,217	1,661
Steel rails	327,883	385,584	500,582	308,375	14,430	18,520	31,732	22,822
Rail fastenings, switches, frogs, etc.	129,571	80,349	157,819	71,756	11,654	7,968	15,817	9,650
Boiler tubes	52,724	44,565	69,836	38,455	8,140	6,688	13,267	7,784
Casing and oil-line pipe	256,749	179,781	233,377	371,914	24,520	18,912	40,122	48,627
Seamless black pipe, except casing and oil-line	21,577	14,870	18,717	21,692	2,355	1,838	2,856	3,377
Black and galvanized welded pipe	121,587	146,343	159,095	103,321	12,301	15,274	22,345	17,645
Cast-iron pipe and fittings	73,780	47,481	49,589	39,284	5,317	3,743	5,705	5,635
Malleable-iron screwed pipe fittings	3,681	4,431	5,164	4,490	1,534	1,924	2,888	3,327
All other iron and steel pipe and fittings, n. e. s.	61,627	72,984	101,850	68,938	18,180	17,617	30,914	29,076
Barbed-wire and woven-wire fencing	35,130	56,538	91,233	51,410	4,321	6,379	14,976	8,786
Plain and galvanized wire	121,560	117,727	185,371	127,141	13,315	15,633	31,522	21,245
Woven-wire screen cloth	3,768	3,520	5,985	5,738	2,047	2,300	4,828	4,294
Wire rope and wire strand	31,606	34,711	30,880	13,643	12,301	11,594	10,319	4,846
Electric welding rods	14,134	9,467	14,842	15,834	2,398	1,893	3,362	3,489
Wire, other, and manufactures thereof	22,203	26,096	52,602	41,518	5,911	8,223	15,152	12,245
Wire nails	31,264	19,102	25,754	19,662	2,871	2,047	3,916	3,358
Nails other than wire, tacks, staples	11,059	11,650	15,996	14,914	2,290	2,690	4,083	4,384
Horseshoes	1,681	1,859	897	582	260	275	179	113
Bolts, nuts, rivets, and washers <sup>2</sup>	41,804	31,622	48,323	54,311	10,638	9,216	15,488	16,908
Car wheels and axles	83,962	68,371	88,802	38,714	8,791	7,684	10,342	6,134
Iron castings	46,845	29,334	54,050	46,147	4,529	3,349	5,717	5,722
Steel castings	10,348	4,329	3,857	4,838	2,654	1,218	1,439	2,055
Forgings	28,522	19,353	35,810	27,063	5,184	2,952	6,809	5,621

<sup>1</sup> Effective Jan. 1948, includes shipments under Army Civilian Supply Program.

<sup>2</sup> Except railroad.

No. 1081.—IRON AND STEEL—AVERAGE ANNUAL PRICES, BY CLASS OR KIND:  
1891 TO 1948

[Prices of pig iron, rails, and billets, and wire rods in dollars per long ton (2,240 pounds); other prices in dollars per 100 pounds]

YEAR	PIG IRON			Open hearth rails at mills in Pennsylvania <sup>2</sup>	Open hearth steel billets, Pittsburgh <sup>3</sup>	Wire rods, Pittsburgh	Merchant bars, Pittsburgh	Iron bars (best refined), Pittsburgh <sup>4</sup>	Tank plates, Pittsburgh	Structural shapes, Pittsburgh <sup>5</sup>	Composite steel
	Basic, The Valleys	Southern, No. 2, Cincinnati <sup>1</sup>	Local, No. 2, Chicago <sup>1</sup>								
1891-1895		11.74	12.80	27.27	20.89			1.46			
1896-1900		12.56	14.30	24.96	21.08			1.46	1.50	1.61	1.63
1901-1905		15.80	17.50	27.87	25.76			1.47	1.77	1.60	1.63
1906-1910	16.87	17.66	19.42	28.00	26.60			1.47	1.75	1.57	1.58
1911-1915	13.66	14.10	14.72	28.00	22.43			1.31	1.47	1.32	1.32
1916-1920	32.22	34.17	33.29	44.04	51.78	7 61.77	2.98	3.82	3.73	2.94	3.45
1921-1925	22.31	25.23	24.03	42.76	36.74	46.24	2.08	3.97	2.02	2.05	2.42
1926-1930	17.82	20.05	19.67	43.00	33.49	41.68	1.87	4.44	1.84	1.86	2.22
1931-1935	16.19	16.56	17.31	39.49	27.25	36.55	1.69	3.48	1.68	1.69	1.96
1936-1940	21.48	22.01	21.98	40.04	33.92	43.62	2.21	4.35	2.09	2.09	2.35
1941-1945	23.70	24.61	24.20	40.49	34.00	45.21	2.16	5.37	2.12	2.10	2.31
1926	18.55	24.71	21.64	43.00	35.00	45.00	2.00	4.62	1.88	1.95	2.22
1927	17.70	21.16	19.68	43.00	33.27	42.44	1.84	4.68	1.82	1.83	2.20
1928	16.66	19.70	18.54	43.00	32.67	42.55	1.87	4.64	1.87	1.87	2.17
1929	18.19	18.51	20.00	43.00	34.66	41.50	1.92	4.18	1.93	1.92	2.29
1930	17.98	16.16	18.47	43.00	31.84	36.91	1.71	4.11	1.69	1.69	2.11
1931	15.85	14.52	17.35	43.00	29.36	35.03	1.63	3.69	1.62	1.62	1.96
1932	13.98	13.84	15.87	42.44	26.52	37.00	1.57	3.35	1.57	1.57	1.87
1933	15.24	16.31	16.47	39.26	26.00	35.15	1.64	3.35	1.61	1.68	1.85
1934	17.69	18.80	18.19	36.37	27.10	37.37	1.81	3.50	1.78	1.78	2.05
1935	18.17	19.34	18.68	36.37	27.25	38.21	1.81	3.50	1.80	1.80	2.07
1936	19.10	19.99	19.60	36.50	29.68	39.12	1.95	3.70	1.85	1.85	2.12
1937	22.99	23.20	23.49	41.86	36.45	46.27	2.40	4.50	2.21	2.21	2.54
1938	21.70	22.18	22.20	41.77	35.45	44.93	2.35	4.50	2.17	2.17	2.46
1939	21.09	21.64	21.59	40.00	34.00	43.00	2.19	4.40	2.10	2.10	2.31
1940	22.53	23.06	23.03	40.00	34.00	44.80	2.15	4.64	2.10	2.10	2.30
1941	23.50	24.02	24.00	40.00	34.00	44.80	2.15	5.00	2.10	2.10	2.30
1942	23.50	24.52	24.00	40.00	34.00	44.80	2.15	5.00	2.10	2.10	2.29
1943	23.50	24.25	24.00	40.00	34.00	44.80	2.15	5.14	2.10	2.10	2.29
1944	23.50	24.81	24.00	40.00	34.00	44.80	2.15	5.85	2.10	2.10	2.27
1945	24.52	25.44	25.02	42.44	34.00	46.85	2.21	5.85	2.21	2.10	2.42
1946	27.14	27.61	27.64	43.67	35.21	8 2.29	2.47	6.32	2.47	2.32	2.67
1947	34.78	35.88	34.80	8 2.60	44.38	8 2.73	2.73	7.12	2.80	2.63	3.01
1948	41.62	49.47	41.69	8 2.94	50.46	8 3.44	3.13	(10)	3.19	3.00	11 3.47

<sup>1</sup> At furnace after 1907.<sup>2</sup> Bessemer rails prior to 1927.<sup>3</sup> Bessemer billets prior to 1927.<sup>4</sup> Average for 1898-1900.<sup>5</sup> Average for week of Dec. 28, 1948.<sup>1</sup> Bessemer rails prior to Oct. 22, 1921.<sup>2</sup> Muck iron in 1891.<sup>3</sup> Average for 1919-1920.<sup>4</sup> Not available.<sup>5</sup> Beams prior to Mar. 19, 1929.<sup>6</sup> Dollars per 100 pounds.<sup>7</sup> Preliminary.

Source: Steel and The Iron Age, annual review issues; and American Iron and Steel Institute, annual report.

## No. 1082.—MAGNESIUM—PRODUCTION OF SEMIFABRICATED PRODUCTS: 1941 TO 1948

[Thousands of pounds]

CLASS	1941	1942	1943	1944	1945	1946	1947	1948
Total	13,675	155,164	146,262	1213,418	89,770	15,114	12,500	14,079
Castings:								
Sand								
Permanent mold	11,945	{ 32,024	59,123	75,221	42,471	7,140	6,404	
Die		20,387	81,337	123,904	39,592	532	729	28,214
Sheet, strip, and plate	708	1,346	2,866	2,362	1,680	791	560	
Extrusions	485		887	1,680	2,308	2,900	3,411	1,876
Forgings	451		475	1,029	9,198	{ 3,118	3,231	2,931
	26		45	227	425			

<sup>1</sup> Excludes extruded sheet stock, forging stock, powder, and sticks.<sup>2</sup> Combined to avoid disclosure of individual company operations.<sup>3</sup> Represents extrusions, including forging stock; forgings data not available.

Source: 1941, Department of Interior, Bureau of Mines; Minerals Yearbook. 1942 and subsequent years, Department of Commerce, Bureau of the Census; Facts for Industry Series, M24G and M24E.

## No. 1083.—COPPER AND COPPER-BASE ALLOY ROLLED, DRAWN AND EXTRUDED PRODUCTS—SHIPMENTS, BY KIND: 1939 AND 1947

[In short tons (2,000 pounds). Covers shipments and interplant transfers of copper and copper-base alloy products, including production of these items consumed by producing plant in manufacturing fabricated products. These figures, therefore, represent gross shipments of copper and copper-base alloy products. 1939 figures for copper-base alloys refer to brass and bronze products only; figures for other copper-base alloys excluded and to this extent data not comparable with 1947. Data on shipments, interplant transfers, and produced and consumed in same plant have been combined since data are not comparable for each of these measures separately. Some establishments which reported rolling mill and fabricating operations at same location in 1939 treated each of these operations as separate establishments in 1947. For this reason some of tonnage reported as produced and consumed in same establishment in 1939 was considered as interplant transfers in 1947.]

PRODUCT	1939	1947
Copper and copper-base alloy wire and cable, bare and tinned	381,666	911,207
Unalloyed copper	336,603	835,927
Copper-base alloy	45,063	75,280
Other copper and copper-base alloy rolled, drawn and extruded products	842,027	1,526,783
Unalloyed copper:		
Rod and bar	1 204,903	477,106
Plate, sheet, and strip	107,707	165,438
Pipe and tube	72,795	185,910
Copper-base alloys:		
Rod	1 135,156	242,542
Shapes, drawn, and extruded	2 6,357	28,611
Plate, sheet, and strip	221,224	329,467
Plate and tube	93,885	97,610

<sup>1</sup> Excludes tonnage of rods reported as produced and consumed in same establishment, most of which was consumed in production of wire, rather than fabricated products.<sup>2</sup> Includes extruded shapes only.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

No. 1084.—SELECTED METAL PRODUCTS—FACTORY SHIPMENTS: 1947 AND 1948  
 [Leaders indicate no data available]

PRODUCT AND UNIT OF MEASURE	1947		1948	
	Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
Containers and closures:				
Steel shipping barrels and drums.....number	35,862,610		37,635,865	
Steel packages, kegs, and pails.....do	61,075,633		55,767,922	
Metal cans.....short tons of steel consumed	2,956,116		3,247,058	
Food.....do	2,146,601		2,319,400	
Non-food.....do	809,515		927,658	
Crowns.....gross	319,785,429		323,192,042	
Closures (except crowns).....1,000	11,602,610		11,671,467	
Commercial.....do	10,874,377		10,895,968	
Home canning.....do	728,233		875,499	
Heating and cooking equipment:				
Domestic cooking stoves and ranges.....number	4,510,951	367,932	4,895,324	443,332
Electric.....do	1,048,711	117,848	1,363,742	169,657
Gas, including bungalow.....do	2,286,788	179,615	2,640,693	223,014
Liquid fuel.....do	559,579	20,627	466,777	19,661
Coal and wood.....do	449,356	23,882	295,527	15,685
Combination.....do	171,517	25,960	128,555	20,915
Domestic heating stoves.....do	6,337,759	144,370	5,227,289	108,784
Gas.....do	2,619,895	39,284	2,083,990	29,295
Liquid fuel.....do	2,412,216	87,596	1,939,693	61,607
Coal and wood.....do	1,305,048	17,490	1,203,606	17,382
Water heaters.....do	8,540,565	163,567	2,723,331	136,318
Electric.....do	830,773	52,667	716,182	47,071
Non-electric.....do	2,709,792	110,900	2,007,149	89,247
Direct-fired.....do	2,429,355	101,286	1,851,217	81,508
Indirect.....do	280,437	9,614	155,932	7,739
Range boilers.....do	691,252	7,437	535,717	7,009
Cast iron boilers.....1,000 pounds	326,129	48,274	263,303	43,756
Cast iron radiators and conveactors.....1,000 sq. ft. heating surf.	56,720	24,355	60,332	31,426
Oil burners.....number	1,127,352		419,668	
Residential.....do	1,078,576		392,625	
Non-residential.....do	48,776		27,043	
Mechanical stokers.....do	68,908		85,466	
Warm air furnaces.....do	850,783	141,943	776,548	136,937
Forced air.....do	463,837	100,529	400,973	91,301
Gravity air.....do	386,946	41,414	375,575	45,546
Construction machinery:				
Power cranes and shovels.....do	8,035	132,836	8,289	158,586
Dozers.....do	17,227	20,432	18,668	26,514
Tracklaying tractors.....do	37,624	134,361	39,949	167,341
Plumbing fixtures:				
Bathtubs, cast iron and steel.....do	1,671,795		1,909,238	
Lavatories.....do	2,737,610		3,212,116	
Vitreous china.....do	1,267,759		1,417,152	
Cast iron and steel.....do	1,469,851		1,794,964	
Kitchen sinks.....do	2,639,784		2,640,431	
Vitreous china.....do	111,954		8,965	
Cast iron.....do	1,292,355		1,545,332	
Steel.....do	1,295,475		1,086,134	
Transportation equipment:				
Truck trailers.....do	55,372	138,333	46,960	130,996
Complete trailers.....do	52,071		44,877	
Trailer chassis only.....do	3,301		2,083	
Complete aircraft (civilian).....do	15,616	176,504	7,302	114,208
Aircraft engines (civilian).....do	16,340	49,320	9,039	30,017
Domestic water systems.....do	762,855	55,817	649,143	50,704

Source: Department of Commerce, Bureau of Census; Facts for Industry Series. Data for power cranes and shovels from Power Crane and Shovel Association. Data on electric stoves and electric water heaters from National Electric Manufacturers' Association.

No. 1085.—MACHINERY—VALUE OF PRINCIPAL CLASSES MANUFACTURED: 1929  
TO 1947

[In thousands of dollars. Figures represent total value of production (or shipments) of specified commodities reported by all establishments producing these commodities. Data for selected groups of commodities only are shown. For 1929 and 1947, value represents value of shipments; for other years, value of production]

CLASS	1929	1933	1935	1937	1939	1947
Agricultural machinery (except tractors) <sup>1</sup>	278,271	( <sup>2</sup> )	139,098	226,274	182,683	758,826
Automatic merchandising machines	8,821	5,472	5,989	8,978	6,154	14,535
Bakery machinery and equipment	21,730	7,332	11,869	18,120	17,583	61,296
Blowers and fans	25,243	6,955	15,830	26,282	<sup>3</sup> 24,561	<sup>3</sup> 120,699
Bottlers' machinery (except dairy)	11,082	9,157	8,264	21,135	11,959	34,442
Cash registers, adding, calculating, and card tabulating machines, and typewriters	151,583	46,577	4 83,217	118,552	104,675	<sup>3</sup> 441,672
Cement-making machinery and equipment	4,887	545	1,646	2,065	3,035	8,111
Clay-working machinery (brick, pottery, etc.)	4,402	591	1,071	2,727	2,059	6,983
Concrete products machinery and equipment	4,132	224	1,809	4,053	1,739	17,974
Commercial laundry, dry-cleaning, and pressing machinery	5 36,110	5 7,993	5 14,241	21,969	20,727	93,078
Cotton-ginning machinery	11,760	2,165	4,892	11,300	5,115	20,433
Elevators, escalators, and conveyors:						
Automobile lifts		( <sup>2</sup> )	1,869	4,013	3,786	4,254
Conveying and elevating machinery	48,537	11,413	22,045	33,911	29,773	142,573
Elevators, escalators, and dumb-waiters	44,044	8,322	9,110	21,235	16,244	86,120
Engines (steam and internal-combustion) and turbines:						
Steam engines		( <sup>2</sup> )	( <sup>2</sup> )	1,738	1,155	2,183
Steam turbines		( <sup>2</sup> )	( <sup>2</sup> )	16,214	15,439	15,722
Hydraulic turbines		( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	5,885	10,740
Internal-combustion engines		( <sup>2</sup> )	( <sup>2</sup> )	91,843	90,817	423,040
Flour-mill and grain-mill machinery	8,286	2,354	5,167	6,916	6,087	21,430
Foundry machinery <sup>2</sup>	10,639	1,957	5,585	9,156	6,804	34,431
Glass-making machinery	3,688	1,895	3,543	4,729	4,459	21,609
Locomotives	82,909	2,748	21,735	65,163	42,667	302,251
Machine tools	147,316	16,457	64,515	162,046	166,649	322,356
Motor vehicles:						
Passenger cars, complete	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	1,709,503	4,080,311
Trucks, truck tractors, truck chassis, motor coaches, and fire department vehicles	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	462,517	1,804,689
Oil-field machinery and tools	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	121,881	84,153	262,939
Petroleum refinery machinery and equipment	30,210	4,807	7,931	14,816	10,360	22,478
Printing trades machinery and equipment	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	74,013	52,583	191,232
Pulp and paper industries machinery	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	41,341	31,227	134,713
Pumps, pumping equipment, and air compressors:						
Reciprocating pumps	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	8,159	5,479	13,919
Centrifugal pumps	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	19,539	18,630	100,661
Rotary pumps	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	7,603	8,450	27,724
Turbine pumps	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	31,015
Air compressors	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	28,325	21,233	101,636
Rolling mill machinery and equipment	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	52,139	34,605	96,074
Rubber-working machinery	13,552	3,347	4,883	12,271	13,684	46,445
Scales and balances	25,385	6,805	12,191	17,169	13,544	49,202
Sewing machines (domestic and industrial)	37,378	10,274	18,250	24,593	20,304	63,643
Shoemaking and repairing machinery	12,317	8,130	10,245	10,903	10,603	23,708
Stokers, mechanical	14,054	5,629	11,537	22,176	20,275	19,463
Sugar plant machinery	5,046	794	1,260	4,344	2,935	13,197
Textile machinery and parts	115,525	57,892	64,899	<sup>3</sup> 100,696	85,601	379,953
Tobacco manufacturing machinery and equipment	5,018	1,106	1,693	3,679	3,337	20,146
Tractors (all types)	214,721	( <sup>2</sup> )	137,990	258,855	203,865	744,272
Vacuum cleaners (electric)	35,108	14,411	24,191	36,020	44,160	3 133,107
Washing machines and other domestic laundry equipment	79,011	42,422	50,513	73,291	7 66,282	7 433,955

<sup>1</sup> From annual survey, Farm Machines and Equipment, series M35A.

<sup>2</sup> No comparable data.

<sup>3</sup> Not strictly comparable with figures for earlier years.

<sup>4</sup> Includes postal meters.

<sup>5</sup> Excludes dry-cleaning machinery.

<sup>6</sup> Excludes patterns and molds (of wood, metal, etc.).

<sup>7</sup> Includes parts and attachments.

Source: Department of Commerce, Bureau of the Census; Census of Manufactures reports.

## No. 1086.—ELECTRICAL MACHINERY—VALUE OF SELECTED PRODUCTS: 1933 TO 1947

[In thousands of dollars. Figures represent total value of production (or shipments) of specified commodities reported by all establishments producing these commodities. Data for selected groups of commodities only are shown. For 1947, value represents value of shipments; for other years, value of production]

PRODUCT	1933	1935	1937	1939	1947
Batteries, storage and primary (dry and wet):					
Storage batteries.....	52,129	65,901	78,250	81,122	293,358
Dry batteries (cells).....	12,929	15,307	20,080	25,900	73,073
Wet primary batteries and parts and supplies for dry batteries and wet primary batteries.....	2,386	4,510	3,947	4,195	5,021
Carbon and graphite products:					
Brushes (carbon, graphite, metal-graphite and metal-impregnated).....	2,282	4,150	6,511	2,4,654	2,16,243
Other carbon and graphite products (including electrodes).....	6,715	8,320	13,921	2,13,931	2,52,361
Electric hearing aids.....	(*)	(*)	(*)	3,671	16,868
Electrical appliances.....				94,754	2,83,349
Fans (direct motor-driven).....				15,555	8,298
Water heaters (for permanent installation).....				5,605	3,493
Mixers, whippers, and juicers.....	(*)	(*)		7,372	6,546
Commercial cooking apparatus.....				2,765	3,334
Other electrical appliances.....				63,447	2,61,730
Electrical measuring instrument:					
Electrical integrating instruments.....	(*)	(*)	{ 23,636	19,233	59,046
Other electrical measuring instruments.....			{ 15,300	17,012	98,407
Electric lamps:					
Incandescent-filament.....	49,849	62,703	74,304	73,119	144,527
Other.....		2,072	3,588	6,185	49,860
Electro-therapeutic apparatus.....	(*)	(*)	(*)	5,823	7,601
Engine electrical equipment:					
Battery charging generators (not including automotive starter-motors).....	(*)	(*)	22,359	14,949	50,422
Ignition apparatus for internal-combustion engines.....	23,432	40,528	55,201	69,727	149,110
Fuse and fuse equipment under 2,300 volts (except power distribution cut-outs).....	4,825	5,013	7,117	6,879	20,698
Industrial electrical control equipment (except railway and motor-vehicle controllers).....					
Insulated wire and cable:					
Magnet wire.....	15,165	28,230	47,388	46,039	169,910
Armedored cable or conductor.....	65,637	122,226	245,342	204,430	895,128
Weatherproof or slow burning.....	10,141	16,890	29,805	25,431	331,825
Other.....	4,411	6,845	8,917	12,985	23,914
Radios, radio tubes and phonographs:					
Household radio receivers, television sets, radio phonographs, phonographs, and record players.....				186,404	810,066
Home radio receivers, socket powered.....				95,760	184,668
Radio-phonograph combinations (except television sets).....	(*)	(*)	(*)	17,193	311,982
Phonographs and record players.....				22,506	51,432
Television sets.....				6,806	60,038
Automobile radios (broadcast receivers only).....				27,444	102,560
Other.....				22,695	79,386
Electronic type components for communications and industrial electronic controls.....	(*)	(*)	(*)	75,340	348,916
Radio receiving type tubes (except ballast tubes, voltage regulators and indicators).....	(*)	(*)	(*)	38,063	93,632
Transmitting and industrial type tubes except X-ray.....	(*)	(*)	(*)	5,116	25,321
Phonograph records.....	(*)	(*)	(*)	19,762	102,015
Switchboard apparatus (circuit breakers, panelboards, switchboards and switches):					
Panelboards and distribution boards.....				7,896	16,692
Knife, power and other switches.....				5,382	13,649
Circuit breakers.....				8,019	22,462
Power switchboards.....	(*)			9,008	21,221
Power switching equipment, power connectors, distribution cut outs and fuse links for 2,300 volts and over A. C. service.....				5,884	14,730
Telephone and telegraph apparatus (not incl. wireless).....	21,180	43,584	115,883	94,496	631,910
Transformers (except for measuring instruments).....	6,13,094	23,581	83,613	65,004	326,777
Wiring devices and supplies.....	38,948	63,559	109,529	2,103,601	2,375,653
X-ray equipment and X-ray tubes.....	(*)	(*)	(*)	12,619	49,559

<sup>1</sup> Includes parts and supplies.<sup>2</sup> Not strictly comparable with data for earlier years.<sup>3</sup> Not available.<sup>4</sup> Includes X-ray tubes; for later years data are included in nonradio electronic tubes and X-ray tubes in "X-ray and therapeutic apparatus and electronic tubes" industry.<sup>5</sup> Includes television sets and facsimile sets.<sup>6</sup> Includes radio transformers.

**No. 1087.—FARM MACHINES AND EQUIPMENT (COMPLETE UNITS, ATTACHMENTS, AND PARTS)—SALES, BY CLASS: 1944 TO 1948**

[In thousands of dollars. Excludes data for tractors for nonfarm use. Revised to exclude miscellaneous farm equipment previously included.]

CLASS	1944	1945	1946	1947	1948
Total	617,381	700,178	850,478	1,294,686	1,684,590
Farm machines and equipment (complete units)	432,048	490,505	622,674	975,988	1,307,009
Attachments and parts	186,333	209,673	227,804	318,698	377,491
COMPLETE UNITS, ATTACHMENTS, AND PARTS					
Plows and listers	35,886	40,163	50,694	83,520	99,240
Harrows, rollers, pulverizers, and stalk cutters	22,514	22,599	36,634	57,423	78,167
Planting, seeding, and fertilizing machinery	35,110	43,286	53,838	73,977	109,445
Cultivators and weeder	30,713	33,567	33,942	50,363	78,533
Sprayers and dusters	13,085	14,715	26,280	39,555	42,964
Harvesting machinery	70,786	99,361	113,725	191,570	247,245
Haying machinery	44,743	49,456	59,855	94,865	153,822
Machines for preparing crops for market or for use	21,311	25,230	36,046	42,013	41,713
Farm elevators and blowers	4,585	6,144	10,595	16,389	24,499
Tractors for farm use	247,112	262,099	316,523	536,360	703,640
Farm wagons, trucks, and other farm transportation equipment	10,913	15,864	28,470	36,014	37,627
Farm dairy machines and equipment	36,127	46,752	41,553	31,415	23,890
Barn equipment	6,086	7,087	9,554	11,803	12,693
Barnyard equipment	7,184	8,087	8,844	8,808	10,853
Farm poultry equipment	21,326	24,808	23,925	20,602	20,250

Source: Department of Commerce, Bureau of the Census; published in Facts for Industry Series M35A.

**No. 1088.—FARM MACHINES AND EQUIPMENT, ATTACHMENTS, AND PARTS—SALES: 1929 to 1948**

[In thousands of dollars. Includes data for tractors for nonfarm use; for figures excluding these data, see table 1087. Survey suspended 1932-34]

YEAR	Total	Farm machines and equipment	Attachments and parts	YEAR	Total	Farm machines and equipment	Attachments and parts
1929	492,992	411,681	81,311	1941	638,605	506,170	132,435
1930	417,926	340,276	77,650	1942	622,528	414,536	207,002
1931	208,575	157,745	50,830	1943	602,290	344,854	257,436
1935	277,089	218,462	58,627	1944	1,026,207	694,880	331,327
1936	375,128	301,683	73,445	1945	990,557	697,422	299,135
1937	485,130	405,597	78,533	1946	983,615	689,966	283,550
1938	404,047	316,886	87,161	1947	1,502,598	1,100,592	402,006
1939	386,549	300,286	86,263	1948	1,042,680	1,403,602	478,988
1940	462,415	360,963	101,452				

Source: Department of Commerce, Bureau of the Census; published in Facts for Industry Series M35A.

No. 1089.—TRACTORS, ATTACHMENTS, AND PARTS (FARM AND NONFARM)—SALES, BY KIND: 1943 TO 1948

[Value in thousands of dollars]

YEAR AND TYPE OF PRODUCT	Total value	COMPLETE UNITS				ATTACHMENTS AND PARTS	
		Farm		Nonfarm		Farm value	Non-farm value
		Number	Value	Number	Value		
Total:							
1943	373,340	107,009	64,030	37,120	142,793	50,662	115,855
1944	655,938	258,117	170,153	53,877	262,832	76,959	145,994
1945	559,378	263,164	177,578	52,488	206,917	85,421	89,462
1946	449,561	364,725	221,840	32,119	77,292	94,684	55,745
1947	744,272	590,963	392,212	47,488	124,604	144,148	83,308
1948	961,730	678,141	531,276	57,916	156,593	172,364	101,497
Wheel type:							
1943	101,861	94,550	55,944	9,317	7,273	35,874	2,270
1944	236,895	235,458	157,519	14,502	12,694	59,007	7,275
1945	250,069	224,985	153,170	18,707	15,726	74,695	6,478
1946	279,470	243,271	180,363	12,067	11,909	80,360	6,838
1947	475,086	413,783	331,653	14,882	17,682	117,586	8,165
1948	651,144	510,321	466,855	18,892	29,574	141,646	13,069
Tracklaying type:							
1943	269,959	2,906	6,688	27,746	135,506	14,211	113,554
1944	416,137	6,221	10,415	38,966	250,163	16,806	138,638
1945	303,269	11,149	20,974	32,849	191,033	8,400	82,862
1946	142,150	8,898	18,118	17,367	64,817	10,569	48,646
1947	225,256	11,630	28,332	25,904	105,998	16,281	74,645
1948	268,152	14,153	36,718	26,280	125,210	18,849	87,375
Garden type:							
1943	2,020	9,553	1,398	57	14	577	31
1944	3,406	16,443	2,219	409	70	1,086	31
1945	6,040	27,030	3,494	932	158	2,326	122
1946	27,041	112,556	23,359	2,685	566	3,755	261
1947	43,930	165,550	32,227	6,702	924	10,281	498
1948	42,434	153,667	27,703	13,744	1,809	11,869	1,053

Source: Department of Commerce, Bureau of the Census; published in Facts for Industry Series M37A.

No. 1090.—MACHINE TOOLS—SHIPMENTS, BY MAJOR TYPES: 1939 TO 1947

[Includes light type machine tools, particularly in drilling machines, lathes, grinding and polishing machines, and milling machines. Excludes machine tools specifically designed for home workshops, model makers, garages, and service shops. Data represent complete coverage except for last half of 1944 when coverage was approximately 95 percent.]

MAJOR TYPE	VALUE OF SHIPMENTS (\$1,000)				SHIPMENTS, 1947	
	1939 <sup>1</sup>	1942 <sup>2</sup>	1944 <sup>2</sup>	1946	Number	Value (\$1,000)
Total.....	166,644	1,321,748	497,465	327,222	-----	338,136
Boring machines.....	14,167	137,472	44,321	27,454	1,444	25,825
Broaching machines.....	2,296	9,022	3,151	4,657	532	4,956
Drilling machines.....	12,873	103,728	46,623	33,970	(3)	33,517
Gear cutting and finishing machines.....	11,242	51,804	28,962	17,870	1,682	17,719
Grinding and polishing machines (except gear tooth grinding, honing, lapping, and buffing).....	30,273	209,345	85,433	54,352	(3)	56,364
Lathes.....	50,108	455,250	168,780	103,453	(3)	92,908
Milling machines.....	24,216	246,223	71,015	41,367	7,504	35,278
Planers.....	4,484	29,931	10,962	4,853	152	4,018
Shapers (except gear shapers).....	1,892	78,915	38,218	{ 7,159	1,787	6,880
All other machine tools.....	15,593	15,593	32,086	{ 32,086	(3)	60,671

<sup>1</sup> Value of production from Census of Manufactures.

<sup>2</sup> Only machine tools with a value of \$350 or over are included.

<sup>3</sup> Not available.

Source: 1939, 1946, and 1947, Department of Commerce, Bureau of Census; 1942 and 1944, War Production Board. Published in part in Facts for Industry Series M34A.

No. 1091.—AIR CONDITIONING AND COMMERCIAL REFRIGERATION EQUIPMENT—  
SHIPMENTS BY MANUFACTURERS: 1940 TO 1948

[Value figures in thousands of dollars. Statistics cover types normally sold as standard items and more important types of components and accessories. Data include a very limited amount of certain types specifically designed for special uses. Excluded are less important components and accessories such as switches, dehydrators, accumulators, valves, and surge drums and tanks. Companies included represent substantially all producers of equipment shown]

PRODUCT	SHIPMENTS OF COMPLETE UNITS					
	1940		1944		1945	
	Number	Value	Number	Value	Number	Value
Total unitary equipment.....	338,796	76,141	153,026	52,594	214,833	67,791
Walk-in coolers.....	5,156	2,708	5,682	5,082	6,960	6,801
Reach-in refrigerators.....	20,642	5,475	24,300	6,983	36,734	11,965
Bottled beverage-cooling equipment.....	78,397	11,254	929	283	6,493	1,400
Bulk beverage-dispensing equipment.....	20,504	4,571	329	221		
Display cases.....	36,363	16,281	7,600	4,186		
Soda fountain equipment and ice cream cabinets.....	84,855	18,617	6,873	3,204	8,974	3,356
Soda fountain equipment.....	8,265	4,877	503	372	1,555	780
Ice cream cabinets, hardening and dispensing.....	74,281	11,940	2,660	641	7,419	2,570
Counter freezers.....	2,309	1,800	3,710	2,190		
Frozen food cabinets.....	9,608	1,959	2,289	754		
Farm and dairy-milk coolers.....	(1)	(1)	28,552	4,756	38,601	5,818
Drinking-water coolers.....	44,846	4,632	55,895	6,562	82,915	10,506
Laboratory and industrial freezing equipment.....	(1)	(1)	1,100	931	1,123	673
Ice-making machines.....	1,045	628	3,665	3,351	2,805	4,044
Air-conditioning units—store type.....	5,880	4,467	4,468	3,015	13,847	10,903
Absorption systems.....	(2)	831	(2)	2,410	(2)	5,308
Special refrigeration units and systems for war purposes.....			11,015	10,183	(2)	(2)
Miscellaneous air-conditioning and refrigeration equipment.....	31,500	4,719	329	71	(2)	(2)

PRODUCT	TOTAL SHIP- MENTS <sup>3</sup>		DOMESTIC SHIP- MENTS		TOTAL SHIP- MENTS <sup>3</sup>		DOMESTIC SHIP- MENTS	
	Number	Value	Number	Value	Number	Value	Number	Value
Total components and accessories.....	45,405	.....	42,483	.....	71,896	.....	67,885	.....
Condensing units.....	211,021	18,808	197,564	17,423	354,401	36,902	338,157	34,449
Ammonia refrigerants.....	985	964	902	893	1,785	2,508	1,642	2,334
Refrigerants except ammonia.....	210,036	17,844	196,662	16,530	352,616	34,399	336,515	32,115
Air-cooled.....	187,468	12,313	175,153	11,323	327,031	23,378	313,058	22,212
Water-cooled.....	22,568	5,531	21,509	5,207	25,585	11,021	23,457	9,904
Compressors and compressor units.....	84,889	7,084	63,096	6,344	107,340	9,578	104,051	8,852
Centrifugal refrigeration machines.....	112	2,404	101	2,237	185	2,993	181	2,932
Heat-exchanger equipment.....		17,110		16,478		22,422		21,052
Evaporative condensers.....	2,413	1,769	2,212	1,666	2,885	2,829	2,064	2,609
Unit coolers.....	63,417	7,076	60,826	6,721	91,003	10,187	88,153	9,870
Other heat-exchanger equipment.....		8,265		8,001		9,407		9,173
Total components and accessories.....	191,147	.....	175,489	.....	163,099	.....	150,596	.....
Condensing units.....	1,039,772	98,296	973,998	90,145	818,862	71,998	774,417	65,922
Ammonia refrigerants.....	1,646	2,107	1,426	1,862	1,129	1,799	939	1,535
Refrigerants except ammonia.....	973,093	90,224	907,539	82,318	817,733	70,194	773,478	64,887
Air-cooled.....	924,553	73,742	862,645	67,500	774,351	55,379	732,911	50,675
Water-cooled.....	48,540	16,482	44,894	14,818	43,382	14,815	40,567	13,712
Not reported by type.....	65,033	5,965	65,033	5,965				
Compressors and compressor units.....	(2)	34,586	(2)	30,962	450,390	33,493	449,053	30,442
Centrifugal refrigeration machines.....	563	7,889	512	7,014	361	10,351	338	9,732
Heat-exchanger equipment.....		50,376		47,368		47,262		44,500
Evaporative condensers.....	5,997	7,106	5,550	6,650	5,521	7,455	5,086	6,752
Unit coolers.....	141,163	19,611	129,500	18,134	10,223	17,524	95,418	16,419
Other heat-exchanger equipment.....		23,658		22,583		22,283		21,320

<sup>1</sup> Not called for separately.

<sup>2</sup> Not available.

<sup>3</sup> Includes export shipments; not shown separately.

No. 1092.—MOTION PICTURE PRODUCTION—SUMMARY: 1921 TO 1947  
 [Money figures in thousands of dollars]

YEAR, TYPE OF WORK, AND DIVISION	Number of establish- ments	ALL EMPLOYEES		Total expenses other than salaries and wages	Total cost of work done during the year
		Number (average for the year)	Salaries and wages, total		
<b>UNITED STATES</b>					
1921	127	10,659	\$37,693	(1)	\$77,307
1923	97	9,904	38,425	(1)	86,418
1925	132	11,518	49,017	\$44,619	93,636
1927	142	16,013	74,936	59,407	134,343
1929	142	19,602	85,028	99,074	184,102
1931	140	<sup>2</sup> 14,839	<sup>2</sup> 70,637	(1)	154,436
1933	92	19,037	71,344	47,999	110,343
1935	129	27,592	104,430	57,425	161,865
1937	83	32,398	139,551	58,190	197,741
1939	178	36,845	142,543	73,157	215,700
1947	277	34,799	293,046	167,097	460,143
<b>TYPE OF WORK, 1947</b>					
Theatrical-film producers	100	27,549	261,276	121,806	383,082
Nontheatrical-film producers	127	2,445	8,746	9,613	18,359
Laboratories and other service organizations	50	4,805	23,024	35,678	58,702
<b>DIVISION, 1947</b>					
New England	4	17	50	112	162
Middle Atlantic	79	3,701	15,549	29,643	45,192
East North Central	28	1,219	4,216	3,435	7,651
West North Central	10	181	495	1,042	1,537
South Atlantic	4	43	197	433	630
South Central	7	38	204	146	350
West	145	29,550	272,335	132,286	404,621
Los Angeles Metropolitan Area	130	29,393	271,974	131,206	403,180
Other West	15	157	361	1,080	1,441

<sup>1</sup> Not available.<sup>2</sup> Represents production-department employees only; not comparable other years.

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

No. 1093.—MOTION-PICTURE PRODUCTION—WORK DONE DURING YEAR: 1939 AND 1947  
 [Money figures in thousands of dollars]

TYPE OF WORK DONE	1939		1947		TYPE OF WORK DONE	1939		1947	
	Num- ber	Cost of work done during year <sup>1</sup>	Num- ber	Cost of work done during year <sup>1</sup>		Num- ber	Cost of work done during year <sup>1</sup>	Num- ber	Cost of work done during year <sup>1</sup>
<b>Motion pictures, total</b>		215,700		460,143	<b>Nontheatrical films, total</b>		6,573		17,537
Theatrical films, total		186,776		352,530	Advertising films:				
Negative films					Color-process	961		1,929	
Feature subjects, 3,000 feet or over in length:					Black-and-white	742		2,461	
Color-process	27	14,356	68	43,703	Educational films:				
Black-and-white	493	117,830	348	165,432	Color-process	4,118		1,729	
Short subjects (other than news reels), under 3,000 feet in length:					Black-and-white	4,608		2,497	
Color-process	125	1,723	253	4,417	Industrial films:				
Black-and-white	(2)	4,252	187	2,344	Color-process	305		1,768	
News reels		4,441		5,344	Black-and-white	1,870		3,040	
Positive films (cost, excl. cost of producing negatives): <sup>2</sup>					Other films	4,126		851	
Color-process					Unfinished production (cost of work done during year)	543		3,262	
Black-and-white					Receipts for use of studio facilities	1,420		26,720	
News reels					Receipts for laboratory work (including developing and printing done for others)		18,594		53,329
Positive films (cost, excl. cost of producing negatives): <sup>2</sup>					Value of other work done		2,337		10,027
Color-process									
Black-and-white									
Unfinished production (cost of work done during year)	37,758		119,892						

<sup>1</sup> Represents cost of producing motion-picture films, receipts for use of studio facilities, receipts for laboratory work, and value of other work done.<sup>2</sup> Not available.<sup>3</sup> Represents cost of positive films made during year by establishments which performed laboratory work in connection with production of theatrical films. Data on cost of positive films made by outside laboratories included in "Receipts for laboratory work." <sup>4</sup> Probably some "Educational films" were included as "Other films."

Source: Department of Commerce, Bureau of the Census; 1947 Census of Manufactures reports.

## No. 1094.—ALASKA—MANUFACTURES, BY INDUSTRIES: 1899 TO 1939

[Figures for 1939 do not include data for plants reporting products valued at less than \$2,000; those for earlier years cover all plants having products valued at \$500 or more. This increase in minimum value-of-products limit resulted in some reduction in "Number of establishments" reported as compared with what it would have been had minimum of \$500 been retained, but did not seriously impair comparability of figures for 1939 with those for earlier years. Comparable figures for earlier years are given for all industries for which such figures are available]

INDUSTRY	Census year	Number of establish-ments	Wage earners (aver-age for the year)	Wages	Cost of materials, etc., fuel, electric energy	Value of products	Value added by manufac-ture <sup>1</sup>
				Dollars	Dollars	Dollars	Dollars
All industries, total	1939	230	4,816	6,883,988	20,916,757	38,815,436	17,888,679
	1919	147	6,575	8,839,452	19,482,485	41,495,243	22,012,758
	1909	152	3,099	1,948,026	5,119,613	11,340,105	6,220,492
	1899	48	2,260	1,374,680	1,762,583	4,194,421	2,431,838
Boat building and repairing	1939	7	34	23,950	59,800	149,739	89,099
	1909	6	8	2,440	3,139	10,330	7,191
Bread and other bakery products	1939	24	51	67,497	233,216	408,464	175,248
	1909	8	24	41,900	71,099	141,110	70,011
Fish canning and processing	1939	140	4,308	6,288,175	19,990,289	36,367,663	16,377,374
	1919	104	6,085	8,130,659	18,535,578	39,180,922	20,025,344
	1909	46	2,717	1,457,587	4,053,094	9,189,982	5,136,888
	1899	36	2,092	1,243,000	1,588,000	3,821,000	2,233,000
Ice, manufactured	1939	4	12	18,566	10,080	77,776	67,696
Lumber and timber products	1939	21	250	287,376	309,416	900,111	500,055
	1919	22	222	327,202	311,439	980,256	638,817
	1909	22	131	108,201	168,504	400,272	231,708
	1899	10	78	56,000	37,67,000	155,000	88,000
Machine shops	1939	7	10	20,250	44,951	112,702	67,751
Printing and publishing	1939	15	109	129,701	81,916	415,877	233,961
	1909	16	64	100,403	36,392	228,192	191,800
All other industries	1939	12	40	48,473	187,089	383,104	196,015
	1919	21	268	375,501	635,468	1,384,065	748,597
	1909	54	155	237,495	787,385	1,370,219	582,834
	1899	2	90	3,76,000	108,000	218,000	110,000

<sup>1</sup> Value of products less cost of materials, etc., fuel, and purchased electric energy.

<sup>2</sup> Figures for 1939 cover the 12-month period ended Sept. 30, 1939.

<sup>3</sup> Exact figures not available.

<sup>4</sup> Beverages, nonalcoholic, 1 establishment; concrete products, 2; confectionery, 1; ice cream, 2; liquors, malt, 2; sheet-metal work, 2; wire netting, 2. Figures for these industries are combined to avoid disclosing data reported by individual establishments.

Source: Department of Commerce, Bureau of the Census; 1939 Census of Manufactures reports.

## No. 1095.—HAWAII—MANUFACTURES, BY INDUSTRIES: 1899 TO 1939

[See headnote, table 1094]

INDUSTRY	Census year	Number of establish-ments	Wage earners (aver-age for the year)	Wages	Cost of materials, etc., fuel, electric energy, contract work	Value of products	Value added by manufac-ture <sup>1</sup>
				Dollars	Dollars	Dollars	Dollars
All industries, total	1939	474	17,002	11,458,311	75,651,675	134,005,264	58,353,589
	1919	496	9,969	6,636,763	81,178,956	133,096,412	51,917,456
	1909	500	5,904	2,108,903	25,817,734	47,403,880	21,586,146
	1899	222	3,655	1,473,000	12,251,000	23,354,000	11,103,000
Food and kindred products: <sup>3</sup>							
Bread and other bakery products	1939	76	534	413,558	1,625,458	2,949,064	1,323,006
	1919	30	195	87,958	826,838	1,120,294	302,456
	1909	46	107	35,500	219,575	343,520	123,045
	1899	8	4	1,000	5,000	10,000	5,000
Beverages, alcoholic (distilled liquors, malt liquors, sake, and wines): <sup>4</sup>	1939	9	254	249,569	705,194	2,118,907	1,413,713
Beverages, nonalcoholic	1939	27	121	97,355	356,302	816,235	459,033
	1919	32	157	88,534	251,763	518,569	266,806
	1909	22	83	35,391	74,312	194,273	119,981
	1899	7	35	11,000	25,000	89,000	64,000

For footnotes, see p. 988.

## MANUFACTURES IN HAWAII

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No. 1095.—HAWAII—MANUFACTURES, BY INDUSTRIES: 1899 TO 1939—Continued

INDUSTRY	Census year	Number of establish-ments	Wage earners (aver-age for the year)	Wages	Cost of materials, etc., fuel, electric energy, contract work	Value of products	Value added by manufac-ture <sup>1</sup>
Food and kindred products—Con.							
Cane sugar <sup>6</sup>	1939	35	4,371	\$2,894,420	30,482,432	49,250,987	18,768,555
	1919	43	3,143	2,027,128	45,899,268	80,236,244	34,336,976
	1909	46	2,517	781,280	18,721,621	35,949,822	17,228,201
	1899	44	2,369	748,000	9,778,000	19,255,000	9,477,000
Coffee deparchmentizing	1939	9	39	19,555	401,422	464,321	62,899
	1919	10	39	20,516	875,463	1,050,752	175,289
	1909	5	71	12,100	250,705	297,263	46,558
	1899	6	47	9,000	60,000	95,000	35,000
Confectionery	1939	9	28	17,891	56,176	98,354	42,178
	1919	20	102	51,279	393,147	587,330	194,183
	1909	6	21	6,330	23,574	43,162	19,588
Fruit canning and preserving	1939	18	7,949	4,577,867	24,549,416	48,692,282	24,142,866
	1919	9	2,855	1,391,522	10,772,745	18,907,975	8,225,230
	1909	10	816	174,502	926,591	1,591,073	664,482
Canned pineapple and pine-apple juice	1939	9	7,900	4,552,667	24,462,105	48,540,806	24,078,701
Jellies, preserves, etc.	1939	9	49	25,200	87,811	151,476	64,165
Ice cream	1939	10	111	89,004	598,154	1,262,777	664,623
Ice, manufactured	1939	6	66	85,707	42,940	228,642	185,702
	1909	5	40	23,903	21,386	107,111	85,725
	1899	4	19	12,000	16,000	57,000	41,000
Macaroni and noodles	1939	8	26	16,499	40,503	86,067	45,554
	1919	4	17	8,036	76,517	97,799	21,282
Native foods	1939	56	121	64,080	331,861	599,010	267,149
Fish cakes	1939	4	26	18,067	67,921	110,005	42,084
Poi	1939	34	86	39,283	173,283	343,561	170,278
Sugar and rice cakes	1939	8	4	2,184	68,725	105,136	38,411
Tofu	1939	10	5	3,046	21,932	40,308	18,376
Pickled fruits and vegetables; vegetable sauces	1939	6	4	1,837	16,390	38,224	21,834
	1919	3	4	1,447	22,816	34,481	11,665
	1909	6	13	2,522	17,133	33,572	16,439
Potato chips; taro chips	1939	6	17	9,433	23,621	45,372	21,751
Chemicals and fertilizers	1939	6	180	180,984	1,525,294	2,160,108	634,814
Clothing, men's (including shirts) and women's	1939	16	303	149,125	470,079	777,089	298,010
	1919	15	26	11,868	37,860	79,402	41,442
	1909	4	3	600	3,985	7,630	3,645
Concrete products; stone products; lime; pottery <sup>4</sup>	1939	8	7	122	107,366	440,146	810,871
Footwear	1939	6	34	17,899	55,178	88,929	33,751
	1919	12	23	12,513	33,622	64,419	30,797
	1909	14	81	17,159	78,120	126,475	48,355
	1899	14	39	11,000	20,000	47,000	27,000
Furniture	1939	12	71	66,348	97,951	243,247	145,296
	1919	5	10	9,345	8,523	29,169	20,646
	1909	6	54	14,741	38,663	69,752	31,059
	1939	4	9	7,264	6,876	23,036	16,160
Furniture, household (except upholstered)	1939	4	34	28,088	54,029	128,458	73,829
Furniture, upholstered	1939	4	29	30,996	36,446	91,753	55,307
Furniture and fixtures, office and store	1939	7	95	117,839	148,708	358,163	209,455
Iron castings; steel products; machine-shop products. <sup>4</sup>	1939	10	28	29,447	21,757	106,419	84,602
Jewelry; silverware; electroplating <sup>4</sup>	1939	6	36	26,414	46,432	107,963	61,531
	1919	6	54	24,143	51,006	111,335	60,329
Mattresses and bed springs	1939	5	18	11,610	56,677	94,605	37,928
	1919	5	15	11,844	30,389	54,035	23,646
	1909	6	21	7,511	16,137	37,908	21,771
Picture frames; Venetian blinds <sup>4</sup>	1939	11	36	31,722	82,572	155,984	73,412
Planing-mill products <sup>12</sup>	1939	10	161	181,556	462,558	824,498	361,940
	1919	8	135	118,717	422,916	612,906	189,990
	1909	8	254	109,647	97,459	281,325	183,866
	1899	3	35	22,000	42,000	91,000	49,000
Printing, publishing, and allied activities	1939	56	783	880,421	963,976	4,147,337	3,183,361
	1919	49	576	407,055	377,109	1,338,955	961,846
	1909	37	319	146,830	102,442	434,779	332,337
	1899	10	132	22,000	33,000	200,000	167,000
Newspaper publishing and printing, or publishing only	1939	25	573	636,178	570,920	2,928,138	2,357,218

For footnotes, see p. 988.

## No. 1095.—HAWAII—MANUFACTURES, BY INDUSTRIES: 1899 TO 1939—Continued

INDUSTRY	Census year	Number of establish-ments	Wage earners (average for the year)	Wages	Cost of materials, etc., fuel, electric energy, contract work	Value of products	Value added by manufac-ture <sup>1</sup>
				Dollars	Dollars	Dollars	Dollars
Printing, publishing, and allied activities—Con.							
Periodical publishing and printing, or publishing only	1939	6	8	5,293	19,001	42,073	23,072
Book publishing and printing or publishing only; job printing; lithographing; photoengraving <sup>4</sup>	1939	13 25	203	238,950	374,055	1,177,126	803,071
Signs, neon	1939	3	7	8,492	19,528	45,766	26,238
Soap	1939	3	3	1,639	8,592	20,347	11,755
Wood products, not elsewhere classified	1939	8	95	50,826	37,365	108,576	71,211
All other industries	1939	14 48	1,422	1,086,672	12,022,425	17,413,083	5,390,658
	1919	245	2,636	2,361,687	21,103,448	28,157,119	7,063,071
	1909	273	1,450	716,624	5,175,025	7,774,880	2,599,855
	1899	126	975	637,000	2,272,000	3,510,000	1,238,000

<sup>1</sup> Value of products less cost of materials, etc., fuel, purchased electric energy, and contract work.

<sup>2</sup> Figures include data for coffee roasting and spice grinding which are no longer treated as manufacturing activities.

<sup>3</sup> Except butter and cheese, canned tuna, rice cleaning and polishing, meat packing and sausage manufacturing, and vegetable oils and sirups. See note 14.

<sup>4</sup> Combined to avoid disclosing exactly or approximately, data for individual establishments or companies.

<sup>5</sup> Distilled liquors, 1 establishment; malt liquors, 2; sake, 5; wines, 1.

<sup>6</sup> Figures for this industry relate solely to sugar mills, and do not include data for sugarcane plantations.

<sup>7</sup> Reported as confectionery and ice cream.

<sup>8</sup> Concrete products, 2 establishments; stone products, 2; lime, 2; pottery, 1.

<sup>9</sup> Iron castings, 1 establishment; steel products, 4; machine-shop products, 2.

<sup>10</sup> Jewelry, 6 establishments; silverware, 1; electroplating, 1.

<sup>11</sup> Picture frames, 1 establishment; Venetian blinds, 3.

<sup>12</sup> Products of planing mills not operated in conjunction with sawmills.

<sup>13</sup> Book publishing and printing, or publishing only, 2 establishments; job printing, 21; lithographing, 1; photoengraving, 1.

<sup>14</sup> Boat building and repairing, 5 establishments; brooms, 2; butter and cheese, 3; canned tuna, 3; caskets, 1; cushions, pillows, and quilts, 1; drugs, medicines, perfumes, 3; insulation board, 1; lighting fixtures, 1; machinery, farm, 1; machinery, sugar-mill, 1; mats, 1; meat packing, sausage manufacturing, 6; paper goods, 5; prepared feeds, 1; rice cleaning and polishing, 2; skirts, hula, 1; suitcases and trunks, 1; tin cans, 7; vegetable oils and sirups, 2.

Figures for these industries are combined to avoid disclosing data reported by individual establishments.

Source: Department of Commerce, Bureau of the Census; 1939 Census of Manufactures reports.

## No. 1096.—PUERTO RICO—MANUFACTURES, BY INDUSTRIES: 1909 TO 1939

[See headnote, table 1094]

INDUSTRY	Census year	Number of establish-ments	Wage earners (average for the year)	Wages	Cost of materials, etc., fuel, electric energy, contract work	Value of products	Value added by manufac-ture <sup>1</sup>
All industries, total	1939	798	23,484	Dollars 9,220,251	Dollars 76,280,773	Dollars 111,499,641	Dollars 35,218,868
	2 1919	619	15,985	6,705,604	59,955,058	85,506,834	25,521,776
	2 1909	939	15,582	3,639,196	21,500,618	36,749,742	15,240,124
Food and kindred products: <sup>3</sup>							
Bread and other bakery prod- ucts.	1939	219	1,470	590,573	1,853,111	3,067,773	1,214,662
	1919	152	880	514,140	3,426,050	4,761,192	1,335,142
	1909	258	1,197	366,107	1,173,745	1,729,886	556,141
Bread and other bakery prod- ucts, except crackers.	1939	212	1,143	400,129	1,614,952	2,636,533	1,021,531
Crackers	1939	7	327	70,444	238,159	431,240	193,081
Beverages, nonalcoholic	1939	10	93	30,702	145,466	277,014	131,548
	1919	11	56	20,739	49,647	134,402	84,756
Candy; chocolate and cocoa	1939	6	42	10,620	79,546	108,559	29,013
	1909	4	12	3,056	26,814	39,969	13,155
Cane sugar—except refineries <sup>4</sup>	1939	40	7,765	4,501,813	38,880,800	55,377,402	16,496,602
	1919	55	7,490	2,832,022	40,139,359	56,411,932	16,272,573
	1909	108	5,002	1,227,585	12,280,994	20,569,348	8,288,354
Cane-sugar refining <sup>4</sup>	1939	4	1,893	239,313	10,340,938	12,510,477	2,169,630
Canned fruits and vegetables	1939	5	804	35,432	135,375	239,149	103,774
	1909	4	48	4,831	26,930	38,003	11,073
Cheese	1939	3	9	3,020	36,795	48,958	12,163
Corn meal	1939	4	8	2,180	21,991	30,241	8,250
	1919	10	11	5,056	84,558	115,916	31,358
	1909	—	4	597	9,017	12,401	3,384
Ice cream and ices	1939	6	27	11,960	43,584	70,927	27,343
Ice, manufactured	1939	25	285	107,939	118,697	500,765	382,068
	1919	13	86	36,882	86,112	248,889	162,777
	1909	6	38	9,965	29,427	99,927	70,600
Liquors, distilled	1939	9	340	152,695	930,927	1,918,934	988,007
	1909	14	58	15,871	144,129	1,117,084	972,055
Liquors, rectified or blended	1939	28	316	89,754	1,550,465	2,198,363	647,898
Vermicelli, soup paste, and noo-dles.	1939	8	154	60,156	249,382	420,844	171,462
Wines	1939	4	43	8,026	25,932	46,137	20,205
Caskets	1939	6	8	2,568	6,439	16,735	10,296
Drugs and medicines	1939	13	64	19,025	91,771	189,504	88,733
	1919	10	20	7,333	116,479	193,181	76,702
Fertilizers	1939	8	235	107,792	3,163,761	3,863,043	690,282
Furniture and showcases	1939	545	687	171,549	379,336	744,202	364,866
Leather and leather goods	1939	12	53	15,890	54,899	98,980	44,031
	1919	31	140	67,555	185,878	326,595	140,717
	1909	66	358	72,539	191,229	370,493	179,234
Lime	1939	8	90	27,203	62,407	150,777	88,370
	1919	19	62	19,074	21,159	58,014	38,856
	1909	12	28	2,842	7,812	14,149	6,337
Machinery	1939	6	475	271,972	438,548	1,146,696	658,148

For footnotes, see p. 990.

No. 1096.—PUERTO RICO—MANUFACTURES, BY INDUSTRIES: 1909 TO 1939—  
Continued

INDUSTRY	Census year	Number of establish-ments	Wage carriers (average for the year)	Wages	Cost of materials, etc., fuel, electric energy, contract work	Value of products	Value added by manufac-ture <sup>1</sup>
Metal products	1939	7,111	144	Dollars 63,735	Dollars 53,890	Dollars 170,237	Dollars 116,347
	1919	5	271	192,610	388,077	749,268	361,101
	1909	6	188	63,556	57,634	178,210	120,576
Needlework industries	1939	136	6,378	1,575,814	13,323,273	10,277,807	11,745,994
Perfumes, cosmetics, and other toilet preparations	1939	13	74	19,600	141,850	234,978	93,128
Planing-mill products <sup>12</sup>	1939	12	110	55,131	129,285	258,390	129,105
	1909	8	123	39,996	178,415	268,719	90,301
Printing, publishing, and allied activities	1939	59	654	329,217	559,860	1,600,975	1,047,115
	1919	35	311	187,100	266,638	671,587	410,949
	1909	43	353	97,720	146,774	370,559	223,787
Newspapers	1939	12	201	119,676	250,669	840,978	590,309
Periodicals	1939	5	50	35,121	51,626	131,252	79,626
Books; job printing; photo-engraving	1939	13,42	402	174,420	257,565	634,745	377,180
Stone and clay products	1939	15	164	62,045	95,168	254,623	159,455
	1919	8	21	6,771	5,242	30,063	24,821
Floor and wall tiles (except quarry)	1939	9	117	45,742	58,898	132,365	73,467
Brick and hollow structural tile; sewer pipe; other concrete and stone products	1939	14,6	47	16,803	36,270	122,258	85,988
Textile products and other fibre manufacturers	1939	15,10	308	161,591	290,116	571,023	280,907
Tobacco products	1939	47	445	123,615	451,554	740,694	289,140
	1919	183	5,098	2,267,204	3,039,541	8,134,534	5,094,993
	1909	282	7,025	1,479,567	2,059,315	6,060,393	4,001,678
Cigars and cigarettes	1939	42	415	119,706	435,081	713,484	277,803
Tobacco, chewing and smoking	1939	5	30	3,009	15,873	27,210	11,337
Other industries	1939	15,26	847	420,231	2,575,807	3,868,024	1,292,417
	1919	87	1,539	610,089	12,182,318	13,671,261	1,488,943
	1909	123	1,088	254,934	5,168,382	5,880,631	712,249

<sup>1</sup> Value of products less cost of materials, supplies, containers, fuel, purchased electric energy, and contract work.<sup>2</sup> Figures include data for coffee cleaning and polishing, which is now treated as an agricultural activity and therefore was not covered by the 1939 Census of Manufactures.<sup>3</sup> Except "Liquors, malt," and "Foods, miscellaneous." See footnote 16.<sup>4</sup> The figures for this industry do not include data for sugar-cane plantations.<sup>5</sup> Household furniture, 40 establishments; mattresses, 2; office furniture, 1; show cases, 2.<sup>6</sup> Footwear, except rubber, 9 establishments; leather, tan, 1; saddlery, 1; other goods, 1.<sup>7</sup> Aluminum products, 1 establishment; ornamental ironwork, 3; sheet-metal work, 3; tin cans, 3; watch parts, 1.<sup>8</sup> Reported as "Foundry and machine-shop products."<sup>9</sup> Estimated in part by use of ratios derived from reports made for corresponding classes of establishments operated in the United States.<sup>10</sup> As part of the establishments engaged in contract work reported receipts for work done on materials owned by others, and part reported actual values of goods made, all returns have been converted to estimated value of products.<sup>11</sup> This figure is inflated to the extent to which it includes amounts paid for outside work.<sup>12</sup> Products of planing mills not reported in conjunction with sawmills.<sup>13</sup> Books, 1 establishment; job printing, 40; photoengraving, 1.<sup>14</sup> Brick and hollow structural tile, 2 establishments; sewer pipe, 1; other concrete and stone products, 3.<sup>15</sup> Awnings, 1 establishment; hats, felt and linen, 2; hats, straw, 4; hosiery, full-fashioned, 1; rugs, string, 1; rugs, wool, 1.<sup>16</sup> Bus bodies, 1 establishment; buttons, pearl, 2; compressed and liquefied gases, 2; cottonseed oil and meal, 1; diamond cutting, 1; foods, miscellaneous, 5; liquors, malt, 2; matches, 1; novelties, mahogany, 1; oxcarts and truck bodies, 1; paperboard containers, 1; salt, 1; signs, neon, 1; soap, 2; tires, retreading, 1; trunks, 3.

Source: Department of Commerce, Bureau of the Census; 1939 Census of Manufactures reports.

**No. 1097.—PATENT APPLICATIONS AND PATENTS AND CERTIFICATES OF REGISTRATION ISSUED SINCE INITIATION OF THE PATENT SYSTEM: 1836 TO 1948**

[Number of patents granted prior to July 28, 1836, was 9,957. Data include patents issued to citizens of United States and residents of foreign countries. See also *Historical Statistics*, series P 176-187.]

CALENDAR YEAR OR PERIOD	Patent applications <sup>1</sup>	PATENTS ISSUED					CERTIFICATES OF REGISTRATION ISSUED				
		Total	Patents	Plant patents	Designs	Reis- sues	Total	Trade- marks	Trade- mark renew- als	Labels	Prints
1836-1850 <sup>2</sup>	3 14,062	8,387	7,864		4 340	5 183					
1851-1860	44,302	25,087	23,140		1,025	922					
1861-1870	128,763	85,910	79,612		3,181	3,117	6 121	6 121			
1871-1880	206,436	138,355	125,520		7,535	5,300	10,395	8,017	72,378		
1881-1890	352,475	217,821	207,860		8,357	1,614	14,660	10,636	4,024		
1891-1900	410,049	234,956	220,840		13,374	742	18,794	16,903	1,606	9 285	
1901-1905	253,417	148,291	143,791		3,953	547	18,590	12,768		4,579	1,243
1906-1910	307,187	175,618	171,560		3,297	761	36,375	32,060	2,866	1,459	
1911-1915	350,937	194,387	186,241		7,205	851	32,381	27,349	3,522	1,490	
1916-1920	368,737	207,108	197,644		8,486	978	35,364	30,681	3,411	1,272	
1921-1925	427,127	217,525	203,977		12,326	1,222	81,566	68,831	10 2,278	7,361	3,046
1926-1930	450,904	234,857	219,384		13,706	1,677	96,729	71,469	12,067	8,736	4,457
1931-1935	342,861	256,219	239,092	161	15,079	1,887	72,783	52,432	9,282	2,466	2,603
1936-1940	359,544	239,514	200,902	275	26,468	1,879	71,786	52,709	8,409	8,128	2,540
1941-1945	294,273	184,572	164,437	229	18,883	1,023	52,204	34,447	17,757	(11)	(11)
1911	60,121	34,084	32,917		1,010	157	5,112	4,205		659	248
1912	70,976	37,731	36,231		1,342	158	5,896	5,020		633	243
1913	70,367	35,788	33,941		1,683	164	6,063	5,065		708	290
1914	70,404	41,850	30,945		1,715	190	7,874	6,817		719	338
1915	70,060	44,934	43,207		1,545	182	7,436	6,262		803	371
1916	71,033	45,927	43,970		1,759	198	8,087	6,701		864	432
1917	70,373	42,760	41,069		1,512	179	6,197	5,339		613	245
1918	59,800	39,941	38,569		1,207	165	4,912	4,081		654	197
1919	80,638	38,598	36,872		1,523	203	4,874	4,208		520	146
1920	86,893	39,882	37,184		2,485	233	11,294	10,282		760	252
1921	93,395	41,401	37,885		3,277	239	13,605	11,654		1,485	466
1922	89,028	40,297	38,414		1,627	256	14,992	12,793		1,612	587
1923	79,189	40,787	38,034		1,927	226	16,728	14,845		1,261	619
1924	80,888	45,500	42,594		2,671	235	17,562	15,749		1,278	535
1925	84,627	49,540	46,450		2,824	266	18,682	13,840	2,278	1,725	839
1926	86,116	47,627	44,750		2,602	275	21,819	14,904	4,282	1,636	887
1927	92,122	44,444	41,731		2,387	326	20,548	14,586	3,083	1,807	1,092
1928	92,725	45,809	42,376		3,158	335	19,084	14,142	2,049	1,921	972
1929	94,738	48,565	45,284		2,907	374	18,087	14,526	1,008	1,711	842
1930	94,203	48,322	45,243		2,712	307	17,191	13,251	1,665	1,611	664
1931	84,423	55,103	51,766	5	2,037	395	15,328	11,407	1,643	1,683	595
1932	71,864	56,856	53,473	46	2,944	393	13,196	9,613	1,687	1,443	453
1933	60,633	51,563	48,788	33	2,411	333	12,758	9,140	1,665	1,470	483
1934	61,572	47,753	44,429	32	2,921	371	16,063	11,375	2,407	1,786	495
1935	64,369	44,944	40,638	45	3,866	395	15,438	10,897	1,880	2,084	577
1936	69,585	44,820	39,793	49	4,556	422	14,804	10,732	1,886	1,740	446
1937	72,984	43,271	37,095	55	5,137	384	15,276	11,254	1,524	1,830	618
1938	75,420	43,403	38,076	41	5,027	349	13,584	10,212	1,051	1,762	539
1939	71,689	49,080	43,090	45	5,593	352	14,337	10,526	1,309	1,807	605
1940	69,857	48,850	42,248	85	6,145	372	13,805	9,985	2,549	11 969	11 302
1941	59,901	47,978	41,121	62	6,486	309	11,290	8,534	2,765	(11)	(11)
1942	50,057	42,510	38,467	65	3,728	250	9,691	6,797	2,894	(11)	(11)
1943	48,724	33,523	31,074	47	2,220	173	9,432	5,596	3,836	(11)	(11)
1944	59,472	31,197	28,773	38	2,916	170	10,079	6,027	4,052	(11)	(11)
1945	76,119	29,364	25,702	17	3,524	121	11,703	7,493	4,210	(11)	(11)
1946	91,972	24,775	21,819	56	2,770	121	13,841	8,116	5,725	(11)	(11)
1947	83,313	23,433	20,149	52	2,102	130	12,116	8,975	6,140	(11)	(11)
1948	75,952	28,086	23,973	44	3,968	111	1316,519	11,472	5,047	(11)	(11)

<sup>1</sup> Figures include patents for inventions, designs, and reissues of patents. Includes applications without fees.

<sup>2</sup> Data are for period from July 28, 1836, to Dec. 31, 1850, except as otherwise specified.

<sup>3</sup> Data are for 11 years beginning 1840; records prior to this date are not available.

<sup>4</sup> Data are for 8 years beginning 1843.

<sup>5</sup> Data are for 13 years beginning 1838.

<sup>6</sup> Data are for the year 1870.

<sup>7</sup> Data are for 7 years beginning 1874.

<sup>8</sup> Registration of labels suspended from May 27, 1891, to June 9, 1896.

<sup>9</sup> Data are for 8 years; first print registered Mar. 7, 1893.

<sup>10</sup> Data are for the year 1925.  
<sup>11</sup> Figures for 1940 are for the six-months period ended June 30, 1940. On July 1, 1940, jurisdiction of prints and labels was transferred to the Copyright Office, Library of Congress, and data concerning them are compiled by that organization. (See table 1100.)

<sup>12</sup> Excluded 150 trade-mark republications (under Trade-Mark Act of 1946) of trade-marks registered under prior acts.  
<sup>13</sup> Excludes 19,730 trade-mark republications.

Source: Department of Commerce, United States Patent Office; records (not published elsewhere). Fiscal year figures published in Annual Report of the Secretary.

No. 1098.—PATENTS AND DESIGNS ISSUED TO CITIZENS OF THE UNITED STATES:  
1939 to 1948

STATE OR OTHER AREA	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
Total	42,372	42,319	42,345	38,299	30,704	28,441	27,124	22,982	20,676	25,991
Alabama	126	107	98	86	55	80	116	63	63	80
Arizona	62	46	50	34	40	30	29	30	23	42
Arkansas	67	45	57	50	33	33	25	32	34	38
California	2,933	2,911	2,915	2,780	2,320	2,108	2,223	2,042	1,710	2,231
Colorado	204	215	235	167	134	139	108	85	106	153
Connecticut	1,325	1,325	1,289	1,292	1,114	987	916	728	738	817
Delaware	325	333	315	339	297	279	300	314	213	235
Florida	221	256	241	255	171	181	148	127	134	184
Georgia	147	139	151	175	156	108	89	82	66	107
Idaho	37	44	67	43	35	26	16	27	15	29
Illinois	4,617	4,591	4,554	4,116	3,393	3,128	2,871	2,325	2,074	2,448
Indiana	1,100	1,063	1,005	997	839	742	643	562	513	663
Iowa	384	377	338	281	259	183	183	159	100	197
Kansas	203	218	216	171	132	121	106	92	86	144
Kentucky	172	167	174	148	108	115	103	80	72	78
Louisiana	152	131	135	135	106	131	92	95	99	140
Maine	84	84	76	59	69	50	59	58	50	43
Maryland	455	432	465	384	337	365	340	310	306	353
Massachusetts	2,009	2,046	2,080	1,827	1,506	1,378	1,259	1,106	1,046	1,336
Michigan	2,590	2,556	2,492	2,327	1,876	1,697	1,607	1,189	1,035	1,346
Minnesota	580	652	664	570	468	451	368	265	270	357
Mississippi	41	57	37	40	37	35	27	20	19	27
Missouri	750	825	933	770	640	538	518	356	332	479
Montana	57	61	51	43	24	32	25	19	28	30
Nebraska	136	103	109	74	66	56	44	47	28	49
Nevada	17	12	14	12	14	17	13	11	10	17
New Hampshire	137	97	101	107	81	73	67	45	56	46
New Jersey	3,800	3,143	3,322	3,202	2,563	2,409	2,427	2,218	2,063	2,309
New Mexico	43	36	37	33	25	45	17	45	30	28
New York	8,783	9,144	9,305	7,377	5,506	5,180	4,882	4,382	3,690	4,664
North Carolina	155	164	164	140	109	103	106	77	79	116
North Dakota	27	28	31	31	74	8	16	10	38	17
Ohio	3,593	3,484	3,344	3,270	2,592	2,440	2,362	1,864	1,623	2,056
Oklahoma	349	359	324	333	274	263	330	201	208	177
Oregon	191	195	211	189	132	134	132	120	94	124
Pennsylvania	8,308	8,143	8,156	8,039	2,313	2,127	2,050	1,701	1,488	1,953
Rhode Island	311	328	370	334	258	220	338	249	203	551
South Carolina	58	70	56	54	50	37	44	29	23	40
South Dakota	39	46	31	23	17	24	12	13	12	18
Tennessee	300	191	194	168	138	137	109	97	120	123
Texas	727	860	765	722	602	522	495	414	371	511
Utah	49	53	76	39	43	37	43	21	31	30
Vermont	54	42	42	47	36	51	32	27	25	31
Virginia	280	235	204	259	190	200	150	159	150	192
Washington	372	333	357	311	239	199	228	180	203	235
West Virginia	182	209	163	170	103	127	109	102	84	85
Wisconsin	941	966	1,012	966	808	812	685	490	484	640
Wyoming	23	20	37	22	24	17	17	13	12	16
Alaska	6	4	5	5	3	3	2	5	2	—
Canal Zone	3	—	1	6	3	5	3	—	—	9
District of Columbia	261	248	208	214	205	206	203	202	157	205
Guam	—	—	—	—	—	—	—	—	—	1
Hawaii	33	39	39	18	22	13	16	17	12	8
Philippine Islands	6	13	4	1	5	5	—	—	—	—
Puerto Rico	5	3	6	4	3	1	4	2	3	2
Virgin Islands	—	—	—	—	—	—	—	—	—	1
U. S. Army	2	1	1	18	19	13	22	12	15	19
U. S. Navy	38	18	18	22	30	20	21	59	61	57
U. S. Marine Corps	2	1	—	—	2	—	4	2	2	1
U. S. Coast Guard	—	—	—	—	—	—	—	—	—	4

Source: Department of Commerce, United States Patent Office; records (not published elsewhere):

No. 1099.—PATENTS AND DESIGNS GRANTED TO RESIDENTS OF FOREIGN COUNTRIES: 1938 TO 1948  
 [See also *Historical Statistics*, series P 180]

COUNTRY	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
Total	5,776	6,338	6,148	5,311	3,943	2,625	2,564	2,112	1,656	1,617	1,984
Argentina	21	22	24	23	24	16	23	25	29	22	24
Australia	68	46	36	36	42	25	27	21	23	12	37
Austria	112	120	63	26	7	5	—	—	1	1	1
Belgium	71	65	52	44	25	30	15	18	1	21	16
Brazil	8	4	9	10	9	5	11	9	6	1	7
Canada	367	345	372	355	310	259	260	255	223	216	289
Czechoslovakia	54	49	54	32	10	13	6	1	1	—	5
Cuba	15	11	16	16	13	14	18	15	9	14	9
Denmark	41	54	44	33	17	16	16	6	1	6	21
England	1,250	1,288	1,308	1,142	1,000	743	843	905	820	766	862
Finland	6	6	5	7	2	2	—	11	1	1	—
France	533	684	376	334	210	182	184	100	39	107	198
Germany	2,205	2,480	2,595	2,218	1,468	722	641	243	100	52	26
Hungary	25	48	63	37	29	11	26	7	3	—	2
Ireland <sup>1</sup>	6	12	17	5	4	3	6	3	3	5	3
Italy	82	91	97	92	82	27	52	28	10	8	4
Japan	87	57	44	36	20	7	15	5	9	2	—
Mexico	20	23	19	19	15	12	9	6	12	17	6
Netherlands	105	238	236	203	134	93	62	20	9	37	94
New Zealand	22	20	14	12	10	8	2	6	4	2	2
Norway	31	26	25	28	14	14	10	6	1	1	7
Poland	10	16	16	4	5	3	—	—	1	1	2
Scotland	48	47	31	35	25	29	20	29	33	25	25
Spain	11	8	8	4	2	5	2	10	4	8	4
Sweden	181	242	226	208	159	126	104	117	91	97	94
Switzerland	215	286	283	270	249	192	175	219	175	151	197
Union of South Africa	21	17	23	21	7	15	14	11	21	17	13
Union of Soviet Socialist Republics	—	1	8	2	4	6	—	—	—	—	—
Wales	13	12	5	4	6	7	9	9	5	5	6
All other countries	63	70	79	46	41	35	64	32	21	22	30

<sup>1</sup> Includes Northern Ireland and Eire.

Source: Department of Commerce, United States Patent Office; records (not published elsewhere).

No. 1100.—REGISTRATION OF COPYRIGHTS BY SUBJECT MATTER: FISCAL YEARS, 1944 TO 1948

[See also *Historical Statistics*, series P 170-175 for data on total registrations and on the registration of books, musical compositions, and commercial prints and labels]

SUBJECT MATTER OF COPYRIGHT	1944	1945	1946	1947	1948
Total	169,269	178,848	202,144	230,215	238,121
Books	—	—	—	—	—
Printed in the United States	40,682	40,544	47,860	53,925	54,774
Books proper	39,998	39,754	43,737	49,243	51,546
Pamphlets, leaflets, etc.	7,585	6,962	7,679	9,903	9,786
Contributions to newspapers and periodicals	27,688	27,936	30,554	34,940	35,797
Printed abroad in a foreign language	4,730	4,856	5,504	4,400	5,963
English books registered for ad interim copyright	82	111	3,513	3,970	2,545
Periodicals (numbers)	602	679	610	712	683
Lectures, sermons, addresses	44,304	45,763	48,289	53,340	59,699
Dramatic or dramatico-musical compositions	1,126	1,177	1,129	972	1,263
Musical compositions	4,875	4,714	5,356	6,456	6,128
Maps	52,087	57,835	68,387	68,709	72,339
Works of art, models, or designs	494	857	1,304	1,779	1,456
Reproductions of works of art	1,743	1,821	3,094	4,044	3,938
Drawings or plastic works of a scientific or technical character	173	186	317	540	309
Photographs	1,957	1,554	1,777	2,147	1,619
Commercial prints and labels	1,270	1,258	1,752	1,838	1,844
Prints and pictorial illustrations	5,953	7,403	7,975	9,674	10,019
Motion picture photoplays	2,426	2,634	5,384	6,506	6,686
Motion pictures not photoplays	604	615	774	866	632
Renewals of commercial prints and labels	1,268	1,120	1,280	1,418	999
Renewals of all other classes	44	30	33	21	20
	10,203	11,337	12,483	13,180	15,796

Source: The Library of Congress, Annual Report.

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